

UNICEF  
Innocenti Research Centre

# Innocenti Social Monitor 2006

Understanding Child Poverty in South-Eastern Europe  
and the Commonwealth of Independent States



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## Innocenti Social Monitor

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All correspondence should be addressed to:

UNICEF Innocenti Research Centre  
Piazza SS. Annunziata, 12  
50122 Florence, Italy  
Tel.: (+39) 055 203 30  
Fax: (+39) 055 203 32 20  
E-mail (general information): [florence@unicef.org](mailto:florence@unicef.org)  
(publication orders): [florenceorders@unicef.org](mailto:florenceorders@unicef.org)  
website: [www.unicef.org/irc](http://www.unicef.org/irc)

# **Innocenti Social Monitor** **2006**

*Understanding child poverty  
in South-Eastern Europe  
and the Commonwealth of Independent States*

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# FOREWORD

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The *Innocenti Social Monitor 2006: Understanding child poverty in South-Eastern Europe and the Commonwealth of Independent States (SEE/CIS)* addresses the situation of children living in poverty in a widely heterogeneous region.

The aim of this study is to present new knowledge and contribute a child-centered methodological approach to enhance understanding of the multidimensional nature of child poverty. Framed by the political commitments undertaken at the UN Millennium Assembly and the Special Session on Children, and anchored on universal human rights values, the *Innocenti Social Monitor 2006* is designed to stimulate effective policy responses and action in countries of the SEE/CIS region towards the decisive improvement of children's lives.

Children experience poverty in a different way from adults. Poverty compromises children's daily lives and has a cumulative and negative impact on their future. Moreover, children are strongly dependent on their family care and protection, and on public policies to overcome deprivation and social exclusion and promote their development. The response calls for well-targeted and child sensitive policy measures.

The lives and livelihoods of families and children across South-Eastern Europe and the Commonwealth of Independent States have undergone dramatic change during the past decade and a half. In the most recent past the change has been marked by improvement, in terms of the resources and choices available to the family, and the opportunity for individuals and communities to engage in policies that affect them. In most of

the region, income poverty faced by children has declined and access to basic social services has been maintained at good levels, in some cases improved compared with the most difficult period of the transition. These critical indications of progress suggest a continuous opportunity for advancing children's development and improving their living conditions.

Nonetheless, the *Innocenti Social Monitor 2006* shows that the enjoyment of human rights remains severely compromised for some groups of children. An estimated 18 million children under 15 years of age live in extreme income poverty in the region. Child poverty declined in almost all the countries since 1998, but at a lower pace than adults and in the context of a sharp decline in the child population of the region. Moreover, disparities in child well-being have increased and poverty is now more concentrated in specific groups facing greater risks: children in large or non-nuclear families, children living in institutions, in rural areas and disadvantaged regions, and children belonging to ethnic minorities. It is also among these vulnerable groups that improvements in health indicators have been slow, and enrollment in pre-school and higher secondary education are lagging behind.

To address these challenges and break the inter-generational transmission of poverty, the *Innocenti Social Monitor 2006* calls for child centered policy approaches and the allocation of adequate resources. Guided by the human rights principles of universality, accountability and monitoring of progress, it places a strong emphasis on actions targeting the most vulner-

able groups of children and on safeguarding “the right of every child to a standard of living adequate for the child’s physical, mental, spiritual, moral and social development”, as called for by the Convention on the Rights of the Child.

Building upon the poverty reduction efforts being made in the region, there is a clear opportunity to place children high in the national agenda and to give a stronger visibility to their well-being. At the same time, understanding the reality of children living in poverty, who they are, where they live and the deprivation they suffer, is still hampered by the lack of appropriate data. For this reason, the *Innocenti Social Monitor 2006* illustrates how governments and national research institutions can use existing data and analysis to stimulate national debate, and to develop and implement

policies for children living in poverty. It also strongly makes the case for a more systematic collection of relevant information through a range of survey instruments with special attention to the most vulnerable groups of children; those who remain largely invisible in statistical data, information and analysis.

Overcoming child poverty, and reducing disadvantage and disparities are fundamental for advancing children’s rights in the region; they are also an investment towards meeting the development challenges ahead – to arrive at healthy, knowledge-based competitive societies where every child can grow up to become all she or he can be.

Marta Santos Pais  
*Director, UNICEF Innocenti Research Centre*

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# EXECUTIVE SUMMARY

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This study examines child poverty in the 20 countries of the South-Eastern Europe and the Commonwealth of Independent States (SEE/CIS) region.<sup>1</sup> The adverse effects on child well-being of the transition from a centrally planned to a market economy have been well documented in earlier studies by the UNICEF Innocenti Research Centre. This report is concerned primarily with the post 1998 period, which has been described as a turning point for the region, in that most of the violent conflicts which characterized the initial transition period have been subdued, and in a number of cases resolved; all countries have shown signs of economic recovery and the overall numbers of families living in poverty have declined. The report presents evidence which shows that, despite these positive signs, large numbers of children in the region are still experiencing poverty and deprivation; and that children have not been benefiting as much as other groups of the population from economic recovery. There are also stark disparities in well-being and opportunities for children in the region: between countries and between the subregions of SEE/CIS, and within countries themselves, as well as between households of different sizes and structures. Child poverty is becoming more and more concentrated in certain groups and geographical areas, suggesting that insufficient steps have been taken by governments in the region to adopt appropriate policy measures, or target sufficient resources, to tackle poverty and inequalities among children.

## Bringing child poverty on to the policy agenda

There are several reasons for undertaking a study on child poverty. The first is the desire to highlight the importance of addressing child well-being in the

region based on fundamental principles of human rights. Three principles of human rights are central to the study: universality; accountability; and the monitoring of progress in the realization of human rights. Respect for the principle of *universality* calls on governments to ensure access by all children to a range of basic social services without discrimination of any kind. The stark disparities in child well-being within countries of the region imply that insufficient consideration is being given to this principle. The principle of *accountability* reiterates States' responsibility for the realization of children's rights and calls on governments to be transparent in their actions – or lack of action – to tackle child poverty. This requires open and transparent institutions and mechanisms for formulating policies and managing and delivering social services, and also monitoring systems to track the impact on children of policies and the functioning of public services. Evidence suggests that current mechanisms are inadequate, and that monitoring systems to inform and evaluate policy efforts are still weak. *Monitoring progress in the realization of human rights* implies the effective implementation of policies, the allocation of available resources to their maximum extent and the ongoing assessment of progress to adjust policy responses and resource mobilization to reduce disparities. It is important that governments translate their commitments into effective action supported by appropriate resources at all levels.

Secondly, children need to become more visible in the poverty debate in the region. Studies and debate about poverty issues have become more frequent in the post 1998 period, because of the international focus on poverty reduction provided by the Millennium

Declaration and Millennium Development Goals framework, as well as the formulation of Poverty Reduction Strategies by 11 countries in the region. Two countries in the region (Bulgaria and Romania) have drawn up national action plans to combat poverty and social exclusion as part of their European Union accession process. Only by understanding the extent and nature of child poverty can governments and development partners prioritize appropriate measures to tackle it, and devise instruments for monitoring progress in improving child well-being.

Thirdly, there is the need to challenge the common assumption that poverty affects adults and children in the same way. The report gives three main arguments on the distinct impact that poverty has on children, and the resulting need for different policy responses. (1) It is stressed that poverty affects children not only in the immediate present, but also in the longer term, having a cumulative impact on their evolving capacities. Investment is needed in children now in order to reduce the probability of them remaining poor as adults, and to avoid perpetuating the transfer of poverty from generation to generation. (2) Children differ from adults in that they can usually do little themselves to improve their situation: they rely on actions and decisions by their families, society and the state. This 'agency' aspect means that it is hard for children to have a direct influence on key decisions affecting their well-being. (3) Children are particularly dependent on public policy to provide the conditions they need to develop and grow out of poverty, particularly for the provision of and access to basic health and education services.

Lastly the report stresses the considerable measurement challenges which still exist if child poverty is to be fully understood in the region. Failure to meet these challenges contributes to a failure to respect the principles of human rights mentioned above. However, even with existing data sources, there is much more which could be done to understand the characteristics and causes of child poverty, given the political will to do so. The analyses contained in the report provide concrete examples of what can be done using existing data.

### **Child income poverty: the gap between poor and non-poor children is growing**

Poverty has been defined and measured in many different ways. In this study child poverty is understood both as income poverty, when a child lives in a household with consumption expenditure below a minimum level,<sup>2</sup> and also as different kinds of deprivation measured in non-monetary terms, such as not attending school, poor nutrition status, no access to immunization, or living in overcrowded housing. The findings for child income poverty can be summarized as follows:

- 1 One in four children in the region is living in absolute poverty, and throughout the region children have a higher probability of being poor than adults.* The share of the child population living in households below the poverty threshold of PPP \$2.15 per day<sup>3</sup> is greater than the proportion of the total population living below this threshold. The use of national poverty lines (which are usually set at higher levels than PPP \$2.15 per day, but are less suited for cross-country comparisons) obviously produces higher estimates of levels of child poverty, and more importantly confirms that children always have higher rates of income poverty than adults.
- 2 In the period 1998–2003, the number of children (aged 0–15) living in households with a per capita consumption level lower than PPP \$2.15 a day decreased from 32 million to 18 million.* While this is largely due to an overall improvement in living standards in the period of economic recovery, part of the overall decline in absolute numbers of children living in income poverty is due to the sharp reduction in the child population which followed the contraction of fertility rates in the transition period: while the overall population in the region increased by circa 1 million in the 1998–2003 period, the child population decreased by circa 11 million.<sup>4</sup> The fact that the relative risk of poverty for children compared to other age groups has increased suggests that the benefits of economic growth have not been spread evenly, and that governments have been slow to use the economic growth to invest adequately in children.
- 3 There are large disparities in children's probability of living in income poverty according to which part of the region they live in.* The comparison of poverty results across the countries of the region reveals strong disparities in child income poverty between countries. Three main subgroups of countries emerge, with low, middle and high levels of child income poverty, only in part corresponding to geographical subgroups identified in the region. The subregions of Central Asia and the Caucasus, together with Moldova, have more than half of their child populations living in income poverty, a level up to 10 times higher than in some SEE countries.
- 4 Child income poverty rates are higher where the share of children in the total population is higher.* The subregions and countries with higher levels of child income poverty are those with lower levels of GDP per capita, but also with higher shares of children in their population, and higher dependency ratios (with the exception of Moldova). In fact, the ranking of countries according to both adult and child poverty rates tends to follow the ranking of countries according to the share of children in their population. For example, children in Bulgaria represent around

20 per cent of the population, and there is a child poverty rate of 8 per cent. In Tajikistan, children represent slightly less than half of the population, and the child poverty rate is 76 per cent.

- 5 *Children in large households throughout the region have a higher risk of being in poverty.* In those countries where children do not represent a large share of the overall population, for example Bulgaria and Russia, it is found that children are concentrated at the bottom of the income distribution (rather than being spread evenly over all income deciles). Whatever poverty line is chosen, children will be found to be at high poverty risk. And although these countries have lower child poverty rates, the risk of poverty for children rises according to the number of children in the household. For example, in Russia the poverty rate for households with two adults and one child is 9 per cent, compared to 34 per cent for households with two adults and three or more children. *The prevalence of child poverty in the region is strongly correlated with the demographic structure of the population, and the prevalence of certain household arrangements, namely non-nuclear families, and families with three or more children.* These households are not getting enough support to cope with the extra expenditure associated with promoting children's well-being. In Moldova, children living in single parent families when migration is the reason for the absence of a parent have a lower risk of poverty than those in complete families, implying that remittances are helping to bring down poverty rates for this group.
- 6 *Within-country trends have tended to mirror those identified for the region as a whole: those areas with large child populations, which began the transition period with higher child income poverty rates, have tended to gain less than other areas.* In most countries in the region, child income poverty rates are higher in rural than in urban areas. This partly reflects the greater concentration of large households with three or more children in rural areas. In all countries for which survey data have been made available, there is evidence of relevant subnational disparities, and these disparities have been growing. In countries with smaller child populations, for example Bulgaria and Russia, younger children (under six years old) have a higher risk of income poverty than other age groups.

### **Non-income indicators confirm the growth in disparities**

Poverty quantified using a monetary unit – income or expenditure – is the most widely used indicator for measuring poverty in this region and elsewhere (for example Millennium Development Goal 1, Target 1, aims to halve the proportion of people living in

income poverty by 2015). If poverty for the overall population is most frequently measured in monetary terms, it is important that the (different) results for child income poverty are highlighted, as above. But income is a means of improving children's standards of living and cannot be treated as a perfect proxy for other dimensions, especially in a region where the quality and scale of social services for children have been declining. The analysis of child income poverty is therefore complemented by looking at outcomes for children in housing, in education and in health and nutrition. The findings for *non-income indicators of child deprivation* can be summarized as follows:

- 1 *Trends in non-income indicators are more mixed than the trends in child income poverty. While there has been a drop in the absolute number of children living in income poverty, trends in non-income indicators are certainly not always positive. In other words, the drop in absolute numbers of children living in extreme income poverty since 1998 cannot be interpreted as meaning that child welfare overall has improved.* Unfortunately the nature, comprehensiveness and consistency of the data available for non-income dimensions do not allow strong statements to be made on trends for the whole region. But the mixed nature of trends for the countries and for the region as a whole is clear: improvement in health indicators has been slow, and there are sometimes signs of stagnation; education enrolment rates show improvement at the compulsory levels, but, particularly in Central Asia, there has been little improvement in enrolment rates for preschool and upper secondary levels.
- 2 *Non-income indicators confirm the large and often increasing disparities in child well-being across the region.* The available microdata for selected countries show that for non-income indicators – as with child income poverty – deprivation is higher where the share of children in the total population is higher.
- 3 *The regional differences in non-income deprivation tend to follow the same patterns as income poverty.* For example, in Russia there is a strong relationship between infant mortality rates, child shares in the population, and child income poverty rates in individual oblasts. In every country, there are districts or cities which perform notably better than others on all indicators of child well-being, and some which do notably worse. *The fact that disparities in child deprivation broadly follow the patterns of disparities in child income poverty implies that income remains a key – but not the only – indicator of child well-being.*
- 4 *Children in rural areas tend to fare worse than those in urban areas on income and most other indicators.* This is particularly true of access to water and a clean heating source, but also regarding

access to education, and standards of education facilities, as well as health outcomes and standards of health facilities. Children in large families, also more prevalent in rural areas, are more likely to be affected by different types of deprivation.

- 5 *The unfinished nature of health and education reform in most countries of the region, together with continuing low levels of public expenditure and investment, mean that, despite the correlations in the patterns of income and non-income measurements of poverty among children, it is important not to rely solely on income poverty results to measure child well-being in the region.* Higher levels of household income and government revenue in theory provide parents and governments with the means to invest in children's education, health and housing conditions. But child well-being depends not just on the presence of more income resources, but also on parental and government decisions on how to allocate resources. Even where parents do want to invest in children, a lack of well-functioning health or education services or utility infrastructure can mean that the investment cannot be made.
- 6 *Throughout the transition period the share of children deprived of parental care has increased in some countries of the region.* The reliance on institutional care is more diffused in Western CIS countries, in Kazakhstan, Bulgaria and – even if decreasing – in Romania. Alternatives to institutional public care are slow to materialize in the region.

*The overall conclusion is that the gap between poor and non-poor children using both monetary and non-monetary indicators is widening, and poverty among children is becoming more strongly associated with certain characteristics, namely large families or non-nuclear families, and residence in rural areas or other disadvantaged regions within countries.*

### **The policy implications: inequalities are being consolidated rather than removed**

It is clear that not all children have gained equally from the economic growth of the post 1998 period. For a large section of the child population there has been no or very little improvement, and inequalities are being consolidated rather than reduced. It is important to remember the impact of time on child poverty – poverty experienced by the children now will have effects in both the short and the long term, and reinforce the chances of children experiencing poverty as adults and transmitting poverty to their own children. Failure by governments to invest in children will prolong the intergenerational transfer of poverty, and contribute to the further consolidation of existing inequalities.

Children, being dependants, add to the needs and costs of the household: the presence of children makes households more likely to be at risk of income poverty, and households with three or more children are particularly vulnerable. Here the agency aspect of child poverty is important: children can do little on their own to improve their situation, and are dependent on families, society and the state to ensure their well-being and improvements in their living standards. The policy implications for countries in the region are therefore mainly concerned with (1) what governments can do to assist families who do not have sufficient material resources to protect their children from poverty; and (2) what governments can do to improve access to and the quality of those public services which are most important for children's well-being. They can be summarized as follows.

*While the provision of direct income support to households with children is common throughout the region, and a majority of children live in households which receive some form of public support, the low level of expenditure means that when households do receive benefits, they tend to be too low to lift the children out of poverty.* Moreover, the most common type of transfer is pensions received by households with children. Social assistance schemes aimed directly at households with children are widespread, but suffer from the fact that they have low priority in public expenditure. Even if explicitly means tested, these transfers are either too low or too poorly targeted to have a significant impact on child living standards. The countries in the region with lower child poverty rates, for example Russia and Bulgaria, are facing a demographic crisis, characterized by an ever decreasing child population and a growing share of the elderly in the total population. The current low level of material support from the governments provides the wrong signals to couples who would like to have children, or more children.

There are two areas of public expenditure which are particularly important for children's development, and which can help advance the realization of child rights and address inequalities, namely health and education expenditure. *Overall levels of public spending on health and education remain low (with one or two exceptions) and for many countries have not increased.* Five countries in the Central Asia and Caucasus regions spend less than 2 per cent of GDP on health: less than most developing countries, and far less than the 5 per cent referred to in some documents of the World Health Organization. The amount of per capita public expenditure in Tajikistan on education was among the lowest in the world in 2001, while levels in Georgia, Kyrgyzstan and Moldova were also lower than in countries with similar or lower levels of GDP per capita.

*The analysis of public expenditure on health and education shows that governments are failing to address*

*inequalities in access to public services*, while informal payments mean that there is more and more pressure on households to compensate for lack of state investment, which in turn penalizes poor households and reinforces inequalities.

Overall, *countries in the region are not spending enough resources on children; and they are not narrowing disparities or overcoming inequalities, in that the resources being spent are not adequately targeted on the poorer children or on regions with inadequate resource bases*. In the post 1998 phase, blaming transition for the lack of investment in children is no longer an acceptable argument: the figures on economic growth since 1998 should imply that more resources are available. Clear policy prioritization is needed now so that children are allocated at least part of the increased resources, and so that more effort is invested in understanding the nature and causes of child poverty. National strategies are required in all countries to mobilize broad support to complete the economic, social and institutional transition process in ways which advance children's rights so they can be realized by all without discrimination of any kind, and through clear reductions in child poverty and inequalities.

Inequalities are also being driven by the type and quality of economic growth in the region. In some countries growth is based on the capital-intensive energy sectors, and has a reduced impact on improving employment opportunities. For this, more broad-based and labour-intensive growth is necessary. In a few countries, growth is also being boosted by remittances from family members working abroad, and this likewise does not contribute to long-term sustainable and equitable growth, and can also mean that children are deprived of a family upbringing.

In some countries of the region, the prioritization of policy efforts and budget resources is taking place within the framework of the Millennium Development Goals discussion process, in others the process of Poverty Reduction Strategies plays a similar role, and for two countries of the region, European accession documents provide statements of plans to address issues relating to poverty and social exclusion. The visibility of children in these documents and discussions varies, but overall there is room to raise awareness among stakeholders of the potential effect of increasing public expenditure for children. These policy documents should include more explicit statements of the effects of broader macroeconomic and fiscal policies, current and proposed, on children's enjoyment of their rights and the narrowing of disparities, for example, policies aimed at reducing regional

differentials in living standards and promoting rural economies. Governance issues affecting the accountability, quality and performance of those public services most vital for child well-being should also be addressed. A policy shift away from placing children in institutions, as well as a firm statement of intent to devote policy efforts and resources to providing social support mechanisms to help families in crisis, is also required.

At present, the task of raising the visibility of children in these processes is also hampered by the failure of States to tackle data and information gaps in order to enable analysts to have access to consistent and reliable data on the situation of children across the region. This study has shown that child income poverty is the aspect of child poverty which can be studied most consistently. But this is largely because data are available through household surveys collected for other purposes. Even in this case, it is not common for this data source – household surveys – to be used for analyses of child income poverty of the kind carried out for this report. In many countries access by analysts to the microdata remains a challenge, again limiting the use which can be made of survey data for the analysis of child poverty.

With regard to other indicators of child deprivation, there is still some resistance in certain countries in the region to improving the collection of data on infant mortality, to systematically collecting data on child nutrition levels, school attendance and learning achievements, and to making the collection of data on access to safe water more meaningful by also assessing the quality of the water delivered, and the regularity with which it is delivered. These data questions need to be addressed both to understand better the extent and nature of child poverty, and also to track the effect of policy measures aimed at addressing different dimensions of child deprivation. Some of them are administrative, and require relatively small investments in data collection and quality assurance mechanisms. Others require more financial resources and new forms of data collection, for example regular surveys including anthropometric measurements of children to get consistent data on trends in nutritional status.

Actions aimed at reducing child poverty and disadvantage and disparities between children are fundamental for advancing child rights in the region, and are also investments towards meeting future development challenges. The future of the region depends to a large extent on investing in a healthy and educated generation, with manageable dependency burdens. This requires a better use of public resources and, for some countries, more generous support from the international community as well.



# 1 CHALLENGES TO UNDERSTANDING CHILD POVERTY

This is a study of child poverty in a fast-changing region. The living standards and well-being of children declined dramatically during the early years of the 1990s, as the transition from planned to market economy got underway. The hardship and suffering experienced during this period, the effects of the economic crisis and armed conflict, have cast long shadows over many children's lives. While the shift from plan to market continues and progress towards democracy remains uneven, what has changed most in recent years is that across the region most violent conflicts have been subdued, if not resolved; economic decline has been replaced by at least five years of economic recovery, and the share of the population living in income poverty has fallen. Yet the danger remains that a part of the new generations of children born since the start of the transition is being left behind. The purpose of this study is to measure and understand better the nature and scale of child poverty in the region, and to highlight the large disparities in child well-being which have emerged in this period of economic expansion, between countries, between regions within countries, and between families.

One of the more dramatic indicators of the upheaval experienced in the region during the 1990s was the mushrooming, often in the midst of bloody conflict, of new independent states. There were nine centrally planned countries in Europe and the Soviet Union prior to 1989, but by the mid-1990s only five of these original states remained. Of the 23 new states,<sup>1</sup> 21 grew out of the collapse of the Federal Republic of Yugoslavia and the Soviet Union. This report focuses

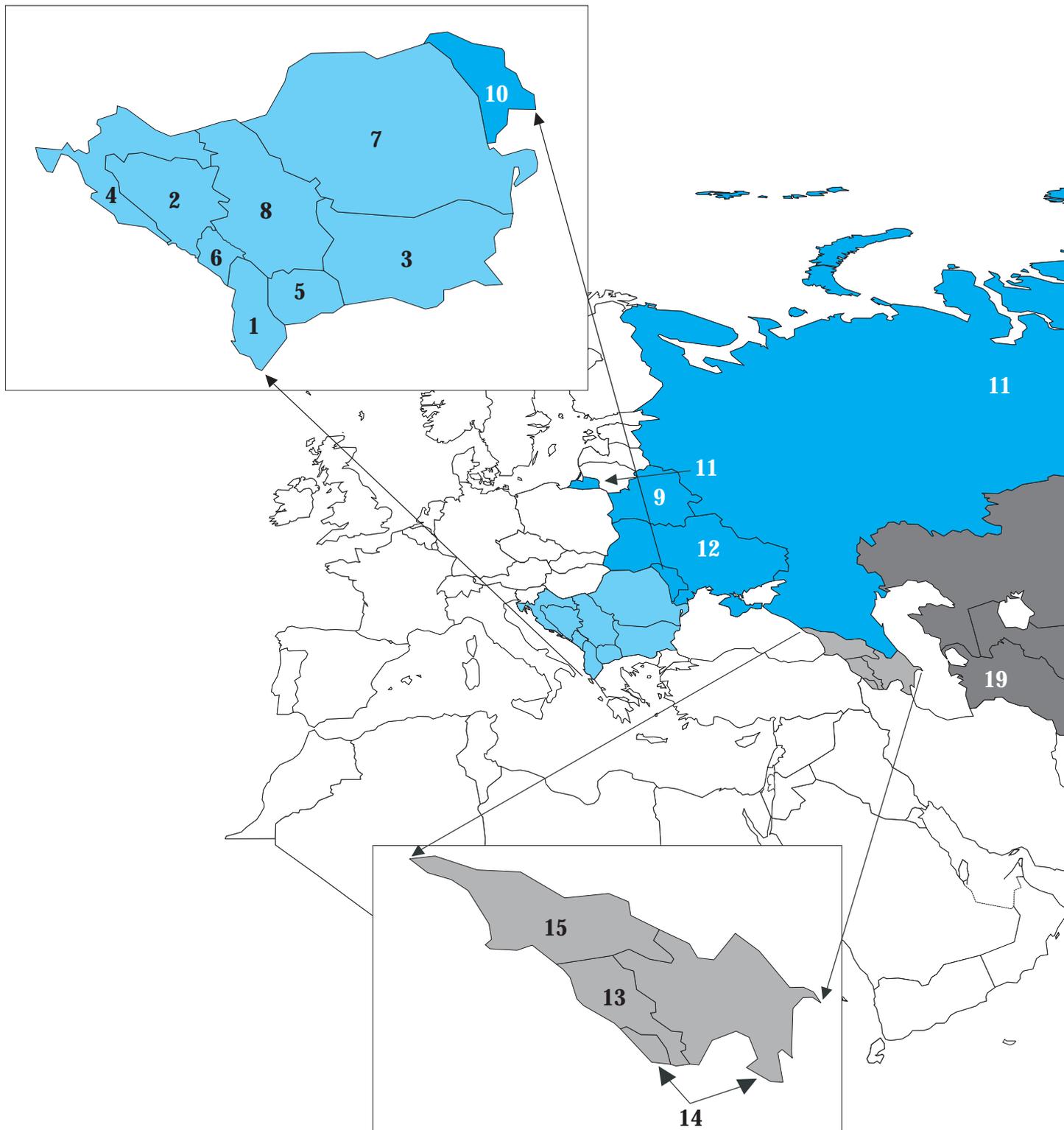
on child poverty and deprivation in 20 of the 28 countries that now stand in the place of the original nine socialist countries: the 12 Former Soviet Union countries which are part of the Commonwealth of Independent States and the eight countries in South-Eastern Europe (see map overleaf).<sup>2</sup> While there is now a substantial literature on poverty in this region, little attention has been paid to the situation of children. This study seeks to develop a child-centred approach, and to place poverty analysis in the broad framework of the realization of children's rights.

This chapter outlines the approach of the report to the analysis of child poverty and deprivation. Section 1 outlines the motives for the study. Section 2 considers how poverty among children can be understood, and how it differs from poverty among adults. Section 3 examines how poverty among children has been studied in practice in two other sets of countries, rich countries and developing countries, and outlines the lessons that can be drawn for this study. Section 4 develops a framework for the analysis of child poverty in SEE/CIS, identifies the indicators used to measure child poverty and deprivation, and outlines some of the institutional and other contexts which can help in understanding child well-being in the region. Section 5 summarizes these various dimensions.

## 1.1 Why focus on child poverty?

In the recent period of sustained economic growth experienced by all countries in the region, not all individuals, and in particular not all children, have

Map of the SEE/CIS region





1	Albania	11	Russian Federation
2	Bosnia and Herzegovina	12	Ukraine
3	Bulgaria	13	Armenia
4	Croatia	14	Azerbaijan
5	FYR Macedonia	15	Georgia
6	Montenegro	16	Kazakhstan
7	Romania	17	Kyrgyzstan
8	Serbia	18	Tajikistan
9	Belarus	19	Turkmenistan
10	Moldova	20	Uzbekistan
<span style="color: lightblue;">■</span> South-Eastern Europe		<span style="color: grey;">■</span> Caucasus	
<span style="color: blue;">■</span> Western CIS		<span style="color: darkgrey;">■</span> Central Asia	

This map does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers.

benefited equally. The main focus of this report is on children, who risk remaining largely overlooked in terms of policy priorities. Addressing this reality from a human rights based approach calls for a strong focus on policies aiming at the promotion of equity and non-discrimination, and at the reduction of disparities among children, on children's universal access to public services of quality and on the promotion of an adequate standard of living for children.

### Poverty and human rights

Poverty raises important human rights questions and is closely linked with the recognition by the Universal Declaration of Human Rights of freedom from want. Even though the word 'poverty' is not specifically used in any of the international human rights treaties adopted since the Universal Declaration, and most United Nations documents do not argue that poverty in itself constitutes a violation of human rights,<sup>3</sup> there is broad agreement that poverty strongly compromises the enjoyment of human rights of people in general, and of children in particular. Upon ratification of the Convention on the Rights of the Child, in force in all countries covered by this report, States formally commit themselves to ensuring the effective realization of children's civil, political, economic, social and cultural rights without discrimination of any kind. In this context, they also recognize "the right of every child to a standard of living adequate for the child's physical, mental, spiritual, moral and social development".<sup>4</sup>

With respect to the analysis of poverty and deprivation, a human rights approach implies a focus on the individual child. While many aspects of poverty and deprivation are seen as having an impact on households or families, human rights are inherent to the human dignity of every person. This differentiation may raise some challenges in the case of children since they are largely dependent on their families for support, care and protection. Indeed, the Convention on the Rights of the Child explicitly recognizes the primary responsibility of parents in providing for their children and in ensuring their upbringing and development, and the responsibility of States in providing necessary assistance to parents in their child-rearing responsibilities. At the same time, the Convention recognizes the child's individual civil, political, economic, social and cultural rights. This duality, in terms of children as individuals and children as family members, and in terms of the responsibilities of both the state and parents towards children, suggests the need for a multidimensional approach. The analysis of the situation of children in the family context (including in terms of family resources such as income and housing provision) is important in assessing the impact on them of poverty and deprivation, but it does not allow for the well-being of the child to be treated separately from that of the

family itself. The analysis of the reality of children as individuals (for example, in terms of rights to health and nutrition, or to education) is therefore also important.

The fact that human rights are inherent to the human dignity of the individual child means that it is necessary not only to estimate the numbers of children who are neglected by the wave of general progress or deprived in different dimensions, but also to understand better the impact of these different dimensions on the enjoyment of human rights by the individual child. Children as individuals have different characteristics which may be highly relevant to their ability to realize their rights. Age, gender, where they live, whether they live with one or both parents (or indeed, with neither parent), and whether those parents are in paid employment are critically important to the 'poverty and human rights' debate, and cannot be ignored when poverty measurements are at stake.

This study of child poverty considers the extent to which the human rights principles of universality, accountability and monitoring progress in the realization of children's rights have been duly taken into account in countries in the region and whether States' policies and actions have been guided by the best interests of the child and the child's right to protection from discrimination.

When poverty is seen as an issue of disparities between those who have and those who have not – or between the ideal of universality of human rights and the reality of gross inequity – then it is also an issue demanding a firm policy response. The right to an adequate standard of living implies that the enjoyment by all children of adequate nourishment, health care, housing and quality education (to name some of the elements of the internationally recognized concept of an adequate standard of living) must be seen as an entitlement and as a policy priority, and not merely as a desirable goal. In this spirit, the United Nations Millennium Declaration resolves to "spare no effort to free our fellow men, women and children from the abject and dehumanizing conditions of extreme poverty, to which more than a billion of them are currently subjected".<sup>5</sup> With respect to policies to reduce poverty, therefore, a human rights-oriented analysis would suggest investigation of the extent to which public policies give distinct attention to the current situation and future opportunities of children, and the degree to which governments have set in place a strategy aiming at the realization of all children's rights, including to an adequate standard of living, and make use of their available resources to this effect "to their maximum extent".<sup>6</sup>

### Children and public policy goals

Existing research suggests that, during the 1990s, children in transition countries were not accorded priority attention in terms of public expenditure or policy-

making, and that states seldom supported the realization of children's economic, social and cultural rights by making use of their available resources to the fullest extent. At present, a clear opportunity exists for states to act on poverty among children, in part because of the recent economic growth in the region, and in part because these governments are now engaging in internationally agreed policy and planning processes to improve human well-being. In particular, all countries have signed the Millennium Declaration of 2000, and have agreed to set and strive towards the achievement of key goals (the Millennium Development Goals or MDGs) that would greatly improve human well-being between now and 2015.

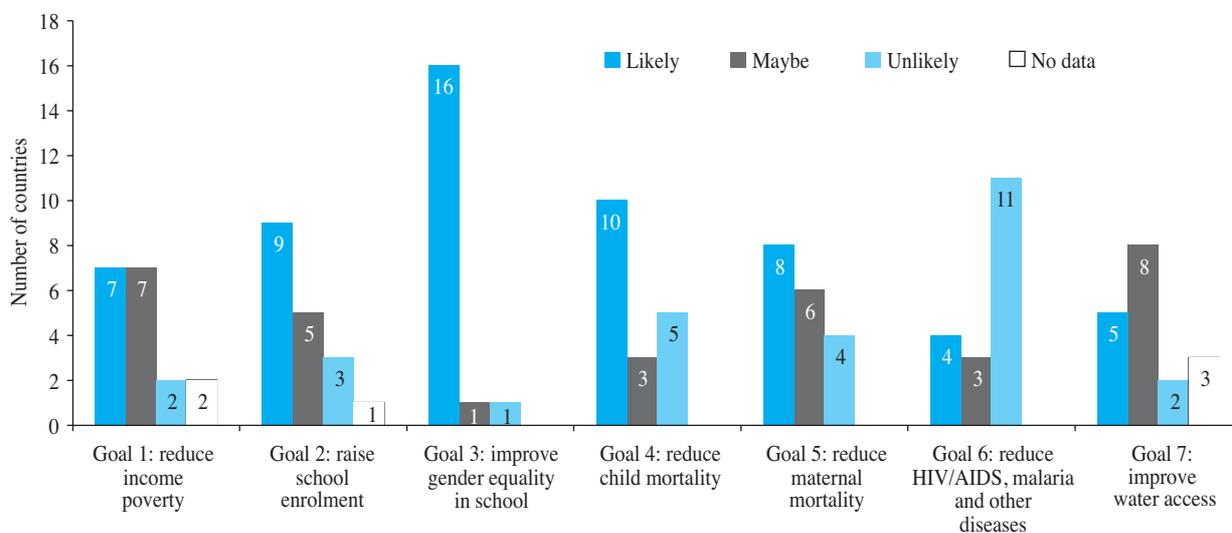
The eight global MDGs reflect the now commonly held understanding that poverty is multidimensional, with each dimension reinforcing the others. The United Nations recommends a set of 18 targets, and 48 indicators, as the basis for each country to develop its own goals and targets, together with indicators for monitoring progress towards these targets by the year 2015. The first seven goals are based on different ways of measuring poverty outcomes, i.e. material resources (money income), nutrition levels, access to school education, equality of opportunity for men and women, health status of mothers and children, incidence of infectious diseases, access to safe water; and within Goal 8 there are also indicators relating to participation in the life of society (for example, through employment, and access to sources of information). Although Goals 2 and 4 (relating to primary school education and under-five mortality rate) are the only ones specifically related to poverty among children, other aspects of child well-being are addressed by all of the other goals.

Substantial progress towards achievement of the MDGs would undoubtedly represent success in the region in the struggle to realize children's rights and improve their overall well-being. However, a recent assessment by the World Bank (2005b) suggests that progress is uncertain, as figure 1.1 shows. Of the first seven development goals, the only goals likely to be achieved by nearly all states are universal primary education and gender equality in education.<sup>7</sup> Only 7 out of 18 countries are seen as likely to meet the target of halving the proportion of people living in absolute income poverty (in households where per capita income is less than the equivalent of PPP \$2.15 per day), while 9 countries are on course to reach targets in terms of reducing child mortality, as are 10 countries with respect to maternal mortality. Moreover, the World Bank assessment points out that one country, Tajikistan, is unlikely to meet any of the goals.

The achievement of national MDG targets, and indeed other targets for human development depends on concrete policy planning. In 10 countries in the region, donor-supported Poverty Reduction Strategies are now providing medium-term macro frameworks within which policies to reduce poverty among children could be elaborated.<sup>8</sup> Poverty Reduction Strategy Papers have been devised by the World Bank and the International Monetary Fund as a mechanism for supporting governments, in part with official development assistance, to prioritize policy measures and target limited budget resources in order to achieve poverty reduction.

While the MDGs and Poverty Reduction Strategies represent potential mechanisms for targeting policy towards poverty reduction in general, for them to be

**Figure 1.1 World Bank evaluation of the prospects for SEE/CIS countries achieving the global Millennium Development Goals (number of countries), 2005**



Data for Turkmenistan are not included in the figure.

Source: World Bank (2005b), p. 5.

effective in reducing poverty among children there is a need for children to become more visible in the strategies, both in the analysis of poverty and the policy priorities which have been formulated, and in terms of the monitoring indicators chosen to evaluate impact. This is also the case for other initiatives to improve well-being in the region, notably the national action plans to combat poverty and social exclusion drawn up by Bulgaria and Romania as part of their European Union accession processes. This study provides practical examples of ways in which children can be given distinct attention in the analysis of poverty and in policy priorities, while also pointing to ways in which data collection has to be improved to allow the impact of policies on children to be effectively assessed.

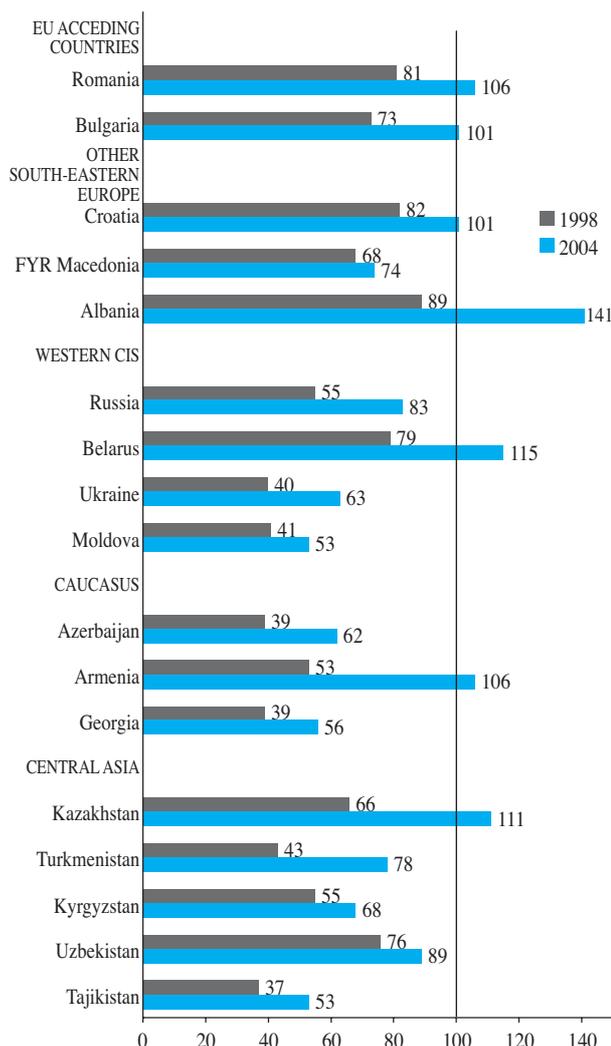
### Economic growth and demographic decline in the region

Since 1998, the SEE/CIS region has experienced unprecedented economic expansion after years of stagnation and decline. Figure 1.2 reports information on the trends in real GDP per capita since 1989 for the region, which is subdivided into five subgroups, the upper two in South-Eastern Europe, and the lower three in the CIS. As the map of the entire region shows, this subdivision is geographically based, but the subregions also have many characteristics in common. In every country, GDP per capita decreased markedly at the onset of the transition, while it increased in every country after 1998. However, growth in GDP per capita since 1998 has compensated for declines after 1989 in only 7 of the 17 countries for which there are data. In the remaining countries, GDP per capita is still estimated to be lower than it was in 1989.

Bulgaria and Romania are in line to join the European Union in the near future, and together with Croatia they represent the richest group of countries in the region, with an average GDP per capita of over PPP \$8,000 in 2004.<sup>9</sup> Since 1998, they have all experienced solid economic growth, and are all now richer as a whole than at the start of the transition. The experience of countries in the remainder of South-Eastern Europe, consisting of Albania, Bosnia and Herzegovina, FYR Macedonia and Serbia and Montenegro, has been more mixed. Political crisis and conflict have held back economic development, particularly in Bosnia and Herzegovina, and while growth in Albania has been strong, it remains the only country in SEE where GDP per capita was less than PPP \$5,000 in 2004.

The four countries of the Western CIS – Belarus, Moldova, Russia and Ukraine – are also heterogeneous in terms of economic trends. Russia is one of the richest countries in the region (with a GDP per capita of approaching PPP \$10,000), while Moldova is one of the poorest (PPP \$1,729). The three Caucasus countries (Armenia, Azerbaijan and Georgia) suffered

**Figure 1.2 Real GDP per capita in 1998 and 2004 (1989 = 100)**



The bars indicate the level of real GDP per capita as a percentage of its 1989 level. In each subregion, countries are ranked according to the level of GDP per capita in PPP\$ in 2004 (for data on GDP per capita expressed in current PPP\$, see Statistical Annex, table 7.1). Data on real GDP for Bosnia and Herzegovina, and Serbia and Montenegro are not available.

Source: TransMONEE Database.

severe drops in GDP throughout much of the 1990s, not least because of continuing and unresolved conflicts, and many suffered further losses as a result of the Russian financial crisis of 1998. Since then, there has been considerable economic growth, which in Azerbaijan and Georgia is forecast to reach record peaks in the coming years, due to income from energy exports, and pipeline transit fees.

In the Central Asian subregion too there are considerable differences between the countries rich in natural resources, Kazakhstan (with a GDP per capita of more than PPP \$7,000) and Turkmenistan (more than PPP \$4,000), and Kyrgyzstan, Tajikistan and Uzbekistan, with GDP per capita ranging between PPP \$1,000 and PPP \$2,000 in 2004.

The recent economic growth in the region – albeit at different rates and from different starting points – has raised hopes that poverty reduction will follow. However the speed and extent of sustainable poverty reduction for children will depend on changes in the quality and structure of economic growth in many countries of the region. There are differences between them in the factors driving growth and its prospects, particularly according to whether growth is being fuelled by increasing energy and natural resource exports, or by the revival and expansion of the manufacturing and agricultural sectors. Azerbaijan, Kazakhstan, Russia and Turkmenistan have the prospect of seeing major increases in GDP in coming years, while Belarus, Georgia and Ukraine may also benefit from pipeline and transit fees, and Uzbekistan may further develop the exploitation of its natural gas resources. The experience of other countries in the world has shown that this type of growth – based on energy sectors which are capital intensive, and without a parallel development of more labour-intensive sectors – does not necessarily lead to sustainable poverty reduction, but rather can lead to increasing

income inequalities. There is also evidence that in some of the poorer countries, such as Moldova and Tajikistan, recent growth in GDP and household incomes has been helped by remittances from migrant workers. In the short term this type of growth may contribute to a reduction in income poverty; it may however have negative indirect socio-economic impacts. In the case of children left behind by migrant parents, the cost may be increases in other types of child deprivation, and it is not clear how long such growth can be sustained.

### Demographic trends

Economic growth has been taking hold in the region, yet the child population has continued to shrink. The dramatic falls in birth rates in some parts of the region are now causing concern about the future economic and social impact of the changes in demographic structures. The falling share of children in the total population, particularly in the Western CIS countries, means that the current generation of children will have to deal with very high dependency ratios when they are adults: there will be fewer and fewer working-age members of the population to support the growing elderly population, and more competing demands on public expenditure for pensions and the health-care needs of the elderly.

#### Box 1.1

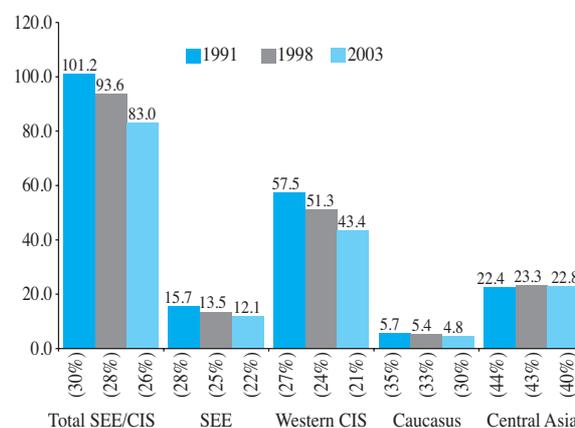
#### Other studies on poverty in SEE/CIS

There are several studies of poverty in the SEE/CIS region which have been carried out by international organizations in recent years. Particular mention should be made of the World Bank's study *Growth, Poverty and Inequality* (2005a), as well as its Poverty Assessments for individual countries of the region. The World Bank studies look at trends in poverty and inequality, different outcomes among and within countries, and the impact of economic growth and public policy choices on poverty reduction. They draw attention to the importance of financial and macroeconomic stability, and highlight the challenges still facing the region in terms of the quality of economic growth, and the need to ensure that growth leads to increases in employment opportunities in both urban and rural areas, in order to have a sustainable impact on poverty reduction.

The UNDP Human Development Reports for individual countries, the Regional Human Development Report for Central Asia (UNDP 2005a), and the Europe and CIS Regional Millennium Development Goals Report (UNDP 2006) have dealt with different dimensions of poverty and human security. The latter report is based on regional development trends and national MDG reports, and is an important source on how the individual countries in the region have been adapting the global MDGs to their own development challenges, highlighting the link between governance issues and poverty reduction.

However, while the World Bank and UNDP studies are concerned with the impact of poverty on the population as a whole, this present report brings the focus firmly round to children: the extent and nature of child poverty, its causes, and the actual or potential impact of public policy on reducing it.

**Figure 1.3 Trends in total child population (0-17) in SEE/CIS (million children, mid-year)**



Percentages in brackets are the share of children in the total population.

Source: TransMONEE Database.

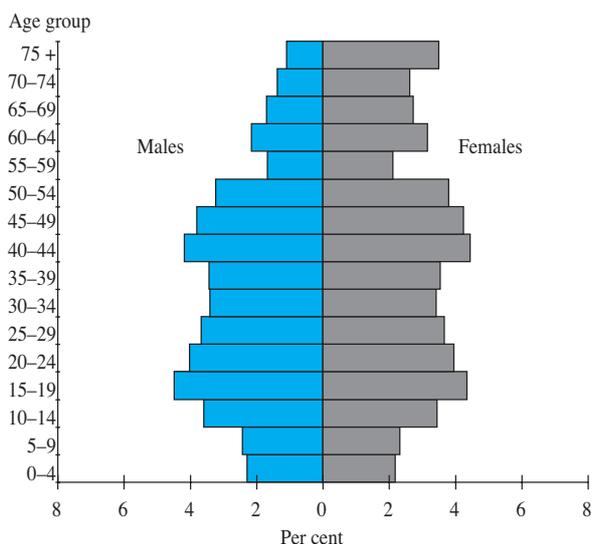
Overall the number of children in the region has decreased by circa 18 million since 1991, with most of the decrease – 14 million children – occurring in the Western CIS countries (see figure 1.3). Fertility rates have fallen in all countries – in some countries they are now among the lowest in the world – and, with the exception of the Central Asia countries, they are all

well below the natural replacement rate. In Central Asia, fertility rates have also fallen, but from higher levels. Children in these countries – where economic growth is on the whole still fragile, and per capita GDP levels low – still represent circa 40 per cent of the population, compared to circa 20 per cent in Russia and the rest of the Western CIS. Figure 1.4 provides the contrasting demographic picture for Russia and Tajikistan. The age/sex pyramids show that Russia's is 'top-heavy', whereas that for Tajikistan is 'bottom-heavy', with those under 20 clearly representing the largest share of the population.

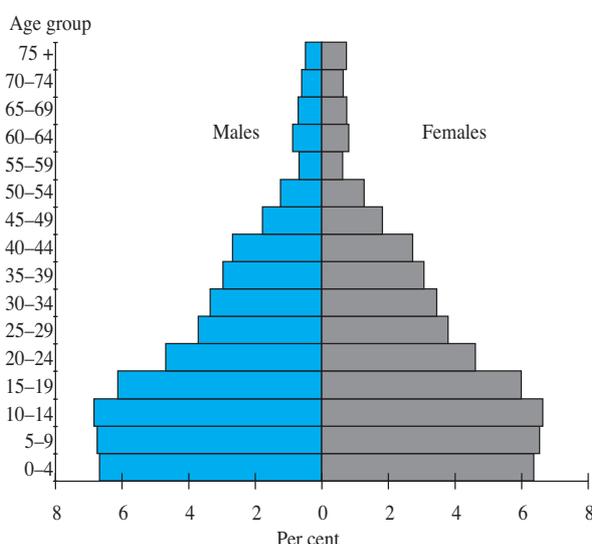
Although the falling birth rates in the region were considered an almost natural response to the economic and social instability of the initial transition period, the most dramatic reduction in the child population is

**Figure 1.4 Age pyramids in Russia and Tajikistan (per cent of total population in each age group)**

*Russia: Age/sex distribution 2003*



*Tajikistan: Age/sex distribution 2003*



Source: TransMONEE Database.

now concentrated in the 0–6 year old group, which in 2003 represented about 12 per cent of the population compared to 23 per cent in 1991, suggesting that even during the fast economic growth period there has not been any clear sign of recovery in fertility rates.

Earlier research has shown that children often suffered severely during the difficult early years of the transition.<sup>10</sup> It is now opportune to assess the extent to which they have gained in the recent period of economic growth. How overall gains translate into gains for children depends on many factors, including the structure of economic growth and demographic trends. Also, gains in one dimension relevant to child well-being (for example, reductions in income poverty) do not necessarily imply gains in all dimensions (such as decreases in childhood mortality, or increases in immunization rates or school attendance). Moreover, *absolute* improvements in a child's situation may occur at the same time as their position *relative* to the general population average worsens, leaving them both better off in one sense (for example, in terms of income poverty) and more deprived in another (for example, parental care).

## 1.2 Understanding poverty and deprivation among children

The definition of poverty is a value choice, and as such, there is no single agreed definition. There is, however, considerable agreement on the sum total of factors which might be either included in the definition of poverty, or otherwise associated with it. This section considers some of the factors that might be associated with poverty and deprivation among children, who, apart from being dependent on adults, also have different needs from them.

### The concepts of poverty

There is a considerable debate in the social sciences and in the human rights literature on the definition of poverty. Until the 1970s, the dominant view within the social sciences, particularly in the context of rich countries (and perhaps also as popularly understood), was to equate poverty with lack of income.<sup>11</sup> However, in considering the concept of freedom from want and in particular of an 'adequate standard of living', United Nations standards have generally tended to take a wider view:

Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control. (Universal Declaration of Human Rights 1948, Article 25(1))

Since the 1970s, there have been a number of developments that have served to broaden the debate on poverty towards and even beyond the concept of standard of living introduced by the Universal Declaration of Human Rights. Human deprivation in areas other than income is now widely accepted as a valid element of poverty. This could be absolute, such as not having enough to eat, or not having access to a clean water supply or to immunization against easily preventable diseases;<sup>12</sup> or relative, such as not being able to afford what is considered to be normal in the society or community in which one lives, be it staying in school past the age of 14, or being able to eat meat several times a week.<sup>13</sup> The Nobel prizewinner Amartya Sen (1999) has taken the deprivation debate in a different direction with his concept of capability deprivation, where the key is not whether one possesses a particular attribute, but rather whether one has the freedom to acquire the attribute, or whether one is constrained by lack of resources or other circumstances. With this conceptualization, those ‘constraining’ factors, for example, discrimination, lack of political freedom, or inability to participate in political and social life, need to be considered just as relevant to poverty as not having enough to eat or not being able to go to school. It is very much in this spirit that UNICEF (2004) proposed the following understanding of child poverty:

Children living in poverty experience deprivation of the material, spiritual and emotional resources needed to survive, develop and thrive, leaving them unable to enjoy their rights, achieve their full potential or participate as full and equal members of society.

This characterization summarizes the wide range of problems and disadvantages often faced by children in poverty. The important point is that, whatever the definition of poverty chosen, whether it is in terms of family income or consumption, or in terms of a certain set of capabilities or outcomes, the link should be maintained with this broader factor: that many adults and children are likely to be poor for a host of reasons that relate strongly to a denial of their rights (such as lack of a political voice, discrimination, or lack of access to education), and that poverty in turn can cause a denial of these rights. Therefore, whether or not one chooses to include such factors in a definition of poverty, they need at least to be included as explanatory factors in the poverty equation. As the UN Office of the High Commissioner for Human Rights (2004) points out, they need to be considered as central in any policies aimed at addressing poverty.

### **How is poverty among children different from poverty among adults?**

Often in international poverty studies, children are not a focus of attention, and little effort appears to go into addressing the specific problems of assessing poverty

among children. What is missing from such studies is the understanding that poverty can and does affect children in different ways from adults, and indeed can have different consequences for them. In this subsection, three principal differences between adults and children are highlighted: adults and children in time; adults and children as agents; and the relationship of adults and children to public policy and the state.<sup>14</sup>

**Time:** Children living in poverty not only suffer deprivation in the present, but their potential to develop is strongly compromised, with a cumulative impact on their evolving capacities, and an increased likelihood that they will be poor in adulthood. A clear rationale for the separate analysis of child poverty arises from the fact that children are rapidly evolving and that their evolving capacities need to be assessed in their own right, as well as the extent to which the child’s personality, talents and abilities are being developed to their fullest potential. This also raises questions as to how this analysis should be carried out. Differences based on age are implicit in many policies to support child survival and development, and in strategies to collect and analyse data on child well-being. Thus with very young children there is often more of a focus on their survival and physical development, while with older children there is more concern with schooling, participation in sports and cultural activities, and intellectual development. However, the care, protection and development of children as human beings in the present rather than simply in anticipation of their adult role, and the comparison of children across different ages, need closer consideration. The absolute centrality of the family context for very young children suggests a separate analysis of their well-being within families, and of policies and services to support them. Among older children, on the other hand, their increasing autonomy and integration into adult society, their growing awareness of their potential to participate and influence social change, suggest a different type of analysis – one that maps out not only transition into adulthood, but also indicators of their participation in society and of their current inclusion or exclusion.

**Agency:** Another way in which poverty among children differs from adult poverty is the fact that a child (particularly a very young child) is not in a position to assume responsibility for choices affecting his or her standard of living or level of deprivation. To some extent, this is also true of adult poverty: there are always some exogenous factors affecting an individual’s poverty. But an adult’s poverty can also be influenced by a person’s own individual choices. Adults – in the family, community and in the national context – are usually able to influence decisions affecting their well-being (e.g. continue their education, applying for a job, make sure they have pension provision, express support or disapproval of political decisions by taking

part in national elections). With children, however, the situation is rather different. To a large extent, they depend on adults' decisions in the family and beyond to make choices which will have an impact on their standard of living and create opportunities to promote children's development to their full potential: for example, decisions on the composition of household expenditure, whether to give priority to education or food, or other items. Even in rich countries, parents in most households have to establish priorities which affect different aspects of their children's development. In poorer countries and households, these choices are often more stark, such as balancing limited resources between food and fuel to warm the home.

Moreover, it is important to consider circumstances shaping the nature and level of care provided to the individual child, within the family, and in many cases within the broader community itself. The situation of children in a large family or living in a remote area, or the special needs of children with disabilities: these are but some concrete examples of realities which have a strong impact on the level of treatment, care and development ensured to the child, and which in turn explain the critical need to assess and address the risk of children's deprivation and social exclusion. These few illustrations are a clear indication of the importance of promoting a distinct analysis of child poverty to assess the specific situation of children within the household and help understand the impact of decisions on their survival and development.

**Public policy and the state:** A third way in which child poverty differs from poverty among adults relates to children's greater reliance on public policy to lift them out of poverty. This is particularly the case if one takes an 'outcomes' approach to the measurement of poverty among children. In most countries (including those in the SEE/CIS region), children's outcomes in terms of education and (to a lesser extent) health and material poverty are clearly bound up with the public policy effort, as indeed national progress is clearly bound up with the improvement of children's living conditions and well-being. Social progress is closely linked with strong investment in children's education and health, and in most countries the state invests in these areas through provision of at least basic levels of health care and education services designed to promote children's physical and mental development. The development of health and education services is usually a key component of Poverty Reduction Strategies.

Children's dependence on basic social services suggests that family income or consumption, not a perfect measure of well-being in any context, may be somewhat less revealing in the case of poverty among children, unless measured in conjunction with indicators of access to basic social services. Research has highlighted the relationship between improved public service provision and reduced poverty at home: where

one occurs without the other, much of the investment may be lost. But where both occur together, they are likely to reinforce each other, producing even stronger outcomes for children.<sup>15</sup>

If poverty among children is viewed as essentially different from poverty among adults, in terms of how children experience it in the present, in its longer-term consequences, in the fact that children can do little about it themselves, and (as a consequence) children's greater reliance on public policy and social services to provide the conditions they need to develop and grow, then this suggests a different type of analysis of poverty among children. In part, this is already recognized in policy interventions and in the collection of information about child well-being. To the extent possible with the information currently available, the analysis in this report follows a child-centred approach. Where it is not possible, the gaps are highlighted. Policy-relevant conclusions in chapter 5 include recommendations on data collection for the child-centred analysis of poverty.

### 1.3 Studying poverty among children in practice

The concepts and ideas proposed in section 1.2 imply a broad and multidimensional framework for the analysis of poverty, where family resources are analysed in conjunction with outcomes for individual children. In this section, two UNICEF sponsored studies of poverty among children in rich and in developing countries are assessed in the light of the discussion so far, and a methodology for this study is proposed that builds on both the discussion above, and on the experience of these two studies.

#### Poverty among children in rich countries: children as household members

The discussion in sections 1.1 and 1.2 above recalls the reality of children as individuals with human rights, as well as family members who are to a large degree dependent on their family for their well-being. Bradbury and Jäntti (1999), in their study of child poverty in rich countries, consider the situation of children in the context of the family, and emphasize their dependence on household resources as the principal factor contributing to their well-being. In their work, they consider the aspects of the three factors outlined in section 1.2 which explain the need to distinguish the analysis of child poverty from that of adult poverty. They focus on family income with the assumption that resources are equally shared within the household, and thus assign to every person in a given household the same poverty status, justifying this assumption with the argument that there is currently insufficient evidence on how children actually benefit from household resources, and equal sharing seems on average the best alternative assumption.

UNICEF (2005a), in a study of child poverty in rich countries, makes a similar assumption.

Bradbury and Jäntti also choose for the most part a relative approach to the estimation of the proportions of children in poor households in rich countries. That is, they use household budget survey microdata to set a poverty threshold for each country studied which relates to average living standards in the country, and then estimate proportions of children living in households with incomes below this threshold. This is justified by the fact that most OECD countries do actually already guarantee a minimum survival level to their population, together with access to basic education and health services, and also on the basis of the specific child focus of the analysis, implicitly recognizing the 'time' aspect of differences between adults and children discussed above:

Arguably, a focus on child poverty also calls for a somewhat different relative poverty line. If children are excluded from social participation, the most important form of this may be exclusion from the lifestyle typically enjoyed by other children. Similarly if the exclusion of children arises via the exclusion of their parents, it will most often be other parents that they compare themselves with rather than, say, the elderly. This suggests the use of a poverty line defined with reference to the average living standard of children in the society.<sup>16</sup>

Bradbury and Jäntti also use a measure of 'absolute poverty' as a check on the relative measures they consider more frequently in their study. Here, poverty is defined as the inability of an individual to obtain a fixed level of welfare. The monetary threshold for absolute poverty is usually calculated by estimating a minimum basket of goods and services which individuals need for day-to-day survival, and costing it. Whereas the level of relative poverty reflects the degree of inequality in a country, especially for the population in the bottom end of the income distribution, the level of absolute poverty is more related to the level of average income. Thus Bradbury and Jäntti show that while the United States and Russia have the same level of relative child poverty (about a quarter live in households with per capita incomes below the relative poverty line, 50 per cent of median per capita income), 98 per cent of Russian children live in households that fall under the absolute US poverty line, compared with fewer than a fifth of US children. However, they do not discuss the merits of relative and absolute measures for children, or indeed the problem of comparing children of different ages, and whether the same criteria can be applied to them.

### **Poverty among children in developing countries: children as individuals**

In their study of child poverty, Gordon et al. (2003) take a different approach. Their methodology seems

more suited to the study of developing countries, as it measures deprivation in relation to basic needs and draws on the definition of absolute poverty adopted at the 1995 World Summit for Social Development:

a condition characterized by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. It depends not only on income but also on access to social services.<sup>17</sup>

The authors use this definition to develop a set of indicators which they argue capture well the different dimensions of 'severe deprivation of human need' in developing countries: children whose height and weight are severely below the average for their age; children who had access only to surface water, or whose nearest source was 15 minutes away; children who had no access to a toilet of any kind; children not immunized against any diseases; children living in dwellings with no floor material; children aged 7 to 18 years who had never been to school; and children aged 3 to 18 without access to television, radio, telephone or newspapers. They argue: "Children who suffer from these levels of severe deprivation are very likely to be living in absolute poverty because, in the overwhelming majority of cases, the cause of severe deprivation of basic human need is invariably a result of lack of resources/income."<sup>18</sup> In part, these are individual measures. For example, a girl may be malnourished and not going to school, while her brother living with her is not malnourished and is going to school. In part they are household-level measures which may nonetheless affect each child differently. For example, a long walk to the nearest water source will arguably weigh heaviest on those who actually have to draw the water.

In every case, however, deprivation is measured with reference to an absolute international threshold, and there is explicitly no concern to measure deprivation relative to the averages in the countries studied. Gordon et al. consider income to be inappropriate for the measurement of child poverty in developing countries, since it is, first, difficult to establish minimum consumption requirements of children (as indeed Bradbury and Jäntti also implicitly acknowledge), and second, inappropriate to measure them using monetary indicators (per capita income or consumption), because the social services and goods which influence child deprivation are not always available in developing countries even if the individual has resources to pay for them. In their analysis, a child is considered poor if he or she suffers from two or more severe deprivations of the basic human needs outlined above. Measurement is possible because of the availability of Demographic Health Survey data<sup>19</sup> for most of the countries in the region: that is, data collected using consistent methods and definitions, and therefore allowing comparison across countries.

Bradbury and Jäntti (1999) and Gordon et al. (2003)

use two fundamentally different approaches and methods of measurement to evaluate the extent of poverty among children in developed and in developing countries. Their choices are influenced by three factors: (1) those measurements they consider more appropriate for capturing and reflecting the manifestations of poverty among children in the regions under study, including consideration of absolute versus relative measures; (2) the degree of emphasis on the child's family or household compared with the individual child; and (3) the data available for measurement across the countries in the region in a consistent and comparable way.

## 1.4 Studying poverty among children in the SEE/CIS region

The purpose of this section is to map out an approach to the study of child poverty in the SEE/CIS region, a region with a distinct profile, which as a whole cannot be seen as 'rich', but equally cannot be seen as 'developing'. This has implications for how this analysis is carried out, particularly in terms of the practical definitions of poverty among children used in this analysis. Also important is the overall political, economic and social context of this analysis, in particular (as noted above) the recent positive trend of economic growth, demographic trends, and the longer-term context of transition from plan to market.

### Definitions and measurement challenges

This is a study of poverty and deprivation among children. For clarity, both 'poverty' and 'deprivation' are given clear meanings in the analysis. A child in 'income poverty' lives in a household where per capita consumption is below a given threshold, mostly, but not exclusively, PPP \$2.15 per person per day, as discussed later in this section. As is common in the literature, 'deprivation' is used to refer to non-monetary aspects of child poverty, for example living in an overcrowded home, or not attending school.<sup>20</sup> 'Children living in poverty' (or 'child poverty' for short) is a blanket term that refers to all aspects of poverty discussed in this analysis.

With its distinct reality, SEE/CIS lies somewhere between the 'rich' and the 'developing' groups of nations. Both the studies of Bradbury and Jäntti (1999) and of Gordon et al. (2003) offer useful pointers on how child poverty might be approached in this middle income group of countries. Moreover, the child rights perspective pursued in this analysis suggests the need to consider the child both as a family member, largely dependent on parents' child-rearing role, and as an individual in his or her own right and entitled to physical, mental and social development in the broadest sense. In this analysis, therefore, the

child's well-being is considered through indicators measured both at the level of the household (most obviously, household consumption, but also indicators of housing conditions) and at the level of the individual (including access to education, infant mortality, immunization and nutrition). The child rights perspective also calls on the need to assess levels of discrimination and exclusion and to invest in narrowing existing disparities, including on the basis of where children live or of the household's characteristics. Finally, the child rights perspective demands an active policy oriented perspective guided by the best interests of the child and on the basis of an ongoing monitoring of progress in the improvement of children's lives through the promotion of equity and fight against marginalization. Indeed, this analysis focuses on poverty indicators that are actionable in terms of public policy.

Both Bradbury and Jäntti (1999) and Gordon et al. (2003), in seeking to develop a working definition of child poverty, recognize that they are restricted by the information that surveys actually ask from household members, or the information contained in aggregate sources. The analysis in this report faces similar restrictions. Region-wide data representing a majority of the countries covered by this report are available only at a highly aggregated level, and do not offer the possibility of examining the links between different characteristics and indicators at the level of the individual child. Moreover, the only trend data available for examining changes in children's well-being over time are at the aggregate level. More detailed household survey microdata are available for only five countries.<sup>21</sup> This suggests a two-stage approach to the analysis of poverty among children.

### Aggregate and microdata analysis

Table 1.1 lists the principal indicators used in this analysis to examine poverty and disparities among children at the aggregate level. In total there are 11 indicators, although some of these are in practice broken down in to smaller subindicators. There are two rationales for their inclusion. First, they are framed by the Convention on the Rights of the Child, in particular its Article 27 cited in section 1.1 above, and in particular by the goal in this Article to achieve the child's development along a number of dimensions. In the light of this provision of the Convention, UNICEF argues that "[T]he main thrust of the Committee's [on the Rights of the Child] recommendations in relation to Article 27 is that countries – both rich and poor – should undertake an holistic analysis of the extent of all forms of child deprivation. Poverty should be mapped and its root causes addressed."<sup>22</sup>

Second, most of the indicators in table 1.1 have been used extensively to examine child poverty across the region, by UNICEF<sup>23</sup> and for individual countries by

several experts.<sup>24</sup> Several of these indicators are available for a large number of the countries covered by this study. The list includes many indicators that are closely related to different Articles in the Convention, and are framed by the Millennium Development Goals – for example, income poverty, malnutrition, infant mortality, education enrolment, and access to clean water. The specific relevance of each indicator for children is explored in more depth as they are analysed in chapters 2 and 3.

At the aggregate level, the indicators outlined in table 1.1 give a broader picture of child poverty. With micro-level analysis, a more detailed picture can be painted of the circumstances of individual children – not only whether they are poor or deprived on a given dimension, but also whether there are overlaps between different dimensions, and the characteristics associated with them. Information on children’s ages, where they live, how many siblings they have, their ethnic background, whether they live with one or both parents (or indeed, neither parent), and their parents’ education levels and employment situations can help contextualize poverty and deprivation. This is essential in a human rights approach designed to promote equity and steadily narrow disparities. For such an analysis, access to original survey microdata files is necessary. These are available for one recent point in time (around 2001–2003) for five of the countries in this analysis: Albania, Bulgaria, Moldova, Russia, and Tajikistan.<sup>25</sup>

### Poverty and deprivation thresholds

The analysis of poverty implies, in its simplest form, the division of the population into two groups – those who are poor and those who are not poor. A more complex approach, applied in this report, allows for examination of distributions of children as well as poor/non-poor dichotomies across different dimensions, and overlaps between them. The large literature on multidimensional poverty suggests numerous methods for determining poverty from uncertain and often contradictory indicators.<sup>26</sup> However, both the proportion of children defined as poor or deprived, and the overlap between different dimensions of poverty, crucially depend on value judgements about poverty and deprivation thresholds, and about the relative importance of different indicators. As noted above, these thresholds can be based on an absolute, exogenous standard, uniform across countries, or on one that is relative to a particular national or regional context.

For the most part, and in keeping with most research on poverty and deprivation in the countries of Eastern Europe and Central Asia, the thresholds used in this analysis are absolute. For example, the threshold of less than 6 square metres of living space per capita, or

**Table 1.1 Dimensions and indicators of child poverty and deprivation**

Areas of well-being/ deprivation	Indicators referring to the household	Indicators referring to the individual child
Income poverty	- Monetary value of the household consumption	
Deprivation in: Health		- Infant and child mortality - Malnutrition - Immunization
Education		- School enrolment/attendance - Educational outcomes in international tests
Housing	- Overcrowding - Access to water - Access to clean fuels	
Parental care		- Children living in incomplete families - Children living in institutional care or in foster care

more than three persons to a room, is used to define overcrowding. Examples of other absolute deprivation thresholds at the level of the individual child include non-attendance at school, stunting (children whose height is very low for their age according to an international standard) and not having piped water available in the home or nearby.

A slightly different approach is used for income. While the World Bank’s PPP \$2.15 per person per day threshold is used to define children living in income-poor households for the purposes of international comparison and examination of trends over time, more distributional approaches are also used extensively for examining the relationship between household income and children’s characteristics, and overlaps with other indicators of deprivation.

In the analysis of all indicators, disparities are measured and described as far as possible. However, in the case of child income poverty, indirect measurements of disparities are used, since doubts about the reliability of survey data in the region in capturing households at the top income levels preclude use of the more standard measurement tools of inequalities, such as Gini coefficients.

What are examined and reported in this study are extreme forms of child poverty. Chapter 2, for example, discusses how the PPP \$2.15 poverty threshold can be considered a measure of extreme income poverty or deprivation of basic material needs in the region, while chapter 3 uses indicators of extreme deprivation such as early childhood mortality, and an extremely restrictive measure of overcrowding. It

should not be forgotten that less restrictive indicators – for example, the World Bank’s PPP \$4.30 per day poverty line – would reveal an even greater number of children who are vulnerable to poverty, even though they cannot be classified as extremely poor. Lack of political will and of policies to promote broad-based economic growth, and public investment in social services for children, could push many of these ‘vulnerable’ groups of children into extreme poverty.

Most of the analysis is concerned with children in the 0–17 year old age groups, but for lack of availability of key indicators, particularly comparable income poverty data, the age group is sometimes restricted to 0–15 years. This means that the report does not look at important aspects of youth deprivation in the region, in particular the high levels of mortality among 15–19 year olds, as well as the problems of socialization, participation and employment in this age group.

## Contexts

With the examination of survey microdata, it is possible to capture at least in some respects how children’s personal characteristics, and those of their families, are associated with their well-being. However, in order to understand the exogenous influences on the situation of children, it is also important to place them and their families in wider contexts. In this report, we consider four types of context in particular:

**Demography:** As was outlined above, the demographic profile of this region has been evolving for some time, and continues to change rapidly, with fertility rates in some countries being among the lowest in the world, but in other countries being higher than the natural replacement levels. In this analysis, the share of children in the total population, at the national level, and within countries at the regional level, stands out as closely related with child well-being. A consistent theme throughout this report is that where the share of children in the population is highest, child poverty also tends to be highest.

**Economy:** Recent economic growth in the region provides an important backdrop for trends in the situation of children, and to assess whether the improvement has benefited all children equally. In addition, if the purpose of economic wealth is to improve people’s lives, then it is pertinent to ask whether children in the richer countries in the region experience less poverty (across its numerous dimensions) than children in the poorer countries, and to examine the relationship between economic disparities within countries and outcomes for children.

**Political environment:** What binds this region together arguably more than anything else is its shared political heritage. All the countries had socialist regimes, for over 70 years in the case of the CIS, and for more than

40 years among the countries of South-Eastern Europe. The norms and practices of these regimes which became embedded in many parts of society remain a considerable factor with influence (both positive and negative) on the legitimacy of government, the effectiveness of policies and, to some extent, the level of corruption.<sup>27</sup> Also important is the fact that 17 of the countries covered by this report did not exist in 1989. The armed conflict that in some cases accompanied their birth not only delayed economic recovery, but arguably had a distorting impact on social policies which several countries are still struggling to overcome.

**Public policy:** At their best, public policies work to ensure long-term economic growth, while at the same time promoting the equitable distribution of its fruits and the development of children’s skills and abilities as the future generation of workers and citizens. However, the implementation of public policies is also very much governed by economic and political constraints, and by administrative shortcomings. Although in many ways transition represented a complete break with the past for the countries of the region, they also inherited structures and institutions – and problems – which existed in the pre-transition period: radical changes have occurred in parallel with slower or no change in many of the institutions, social services and public policies which influence child welfare. Of special concern in this report is the extent to which different aspects of child poverty are being addressed by governments in the region, in particular through the provision of social services, and material support through social transfers.

## 1.5 Summary

In summary, it is useful to outline briefly the key cross-cutting issues that are followed through in the remaining chapters of the report:

- *A human rights approach to the study of child poverty.* The human rights principle of universality calls for the enjoyment of human rights by all children without discrimination of any kind and promotes the steady narrowing of disparities between different groups of individuals, in this case between groups of children. This is considered through examination of characteristics associated with child poverty, and through developing an understanding of how different types of deprivation can occur together and how they compromise the enjoyment of children’s rights. The principle of accountability reiterates States’ responsibility in promoting the fulfilment of children’s rights and in assisting parents’ child-rearing responsibilities. It is closely linked with the monitoring of progress and suggests a critical examination of the tools available for the analysis of child poverty, and of policies implemented to promote social inclusion and reduce poverty and inequity among children.

- *A data-driven approach.* This is an empirical study which attempts to develop conclusions about child poverty that are relevant to the region. Administrative data and nationally representative household survey data are the principal tools. A critical component of the analysis is an appraisal of the efficacy of these tools in developing an understanding of child poverty, both their advantages and their shortcomings.
- *A multidimensional approach.* This report is based on the analysis of child poverty and inequality among children across a number of different dimensions. A key premise underlying this report is that the measurement of poverty among children cannot be reduced to the study of a single indicator.

However, data limitations have meant that not all dimensions and indicators can always be given equal weight, and links between them cannot yet all be tested empirically. There are measurement challenges which have to be solved if this approach is to be developed further and used as the basis for policy formulation and evaluation.

- *A policy oriented approach.* The purpose of the analysis in this report is not only to develop an understanding of child poverty in the region, but also to promote the consideration of policies that, guided by human rights principles, including the best interests of the child, are well positioned to address child poverty and improve living conditions and opportunities for all children.



# 2 CHILDREN LIVING IN INCOME POVERTY

As outlined in chapter 1, poverty and deprivation are experienced by children in several dimensions, as individuals and also in the household setting. In this chapter the analysis concentrates on income poverty among children in the SEE/CIS region.

There are several reasons for concentrating on income poverty.<sup>1</sup> First of all, previous studies have pointed to the overlap between income and other dimensions of poverty in the region: income is not a perfect proxy for other dimensions, but it is often correlated with them, and also income can represent a means to achieving positive outcomes in other dimensions of well-being. Second, income poverty measures are widely used, allow cross-country comparisons, and are relatively easily understood. The first Millennium Development Goal (Target 1) is formulated in terms of halving the numbers living in income poverty (defined as the number of people living below a poverty line of PPP \$1 per day). Thirdly, most existing studies of poverty in the region, for example those used as the basis for Poverty Reduction Strategies and national MDG reports, also use income as their main indicator of poverty, although they do not usually look at the levels and causes of child income poverty. The evidence presented in this chapter shows that income poverty figures for the whole population do not always capture the specifics of child poverty. Fourthly, in spite of the widespread recognition that household income alone cannot capture poverty in all its dimensions, household income and consumption are among the more consistently measured dimen-

sions in people's well-being. Other indicators of deprivation, for example, health or education indicators, are still not measured with the same rigour, regularity and consistency.

This chapter compares income poverty among children and adults in the region, as well as showing trends in child income poverty during the recent period of economic growth. Secondly, it builds up a picture of the relationships between household size, household structure and child poverty. It then examines the distribution of children living in households with different levels of income across urban and rural areas, and across regions within countries.

## 2.1 The overall picture: children across the region have a higher probability than adults of living in poverty

The data on income poverty rates in 2002–2003 among adults and children in 14 countries<sup>2</sup> across the region show that in every country, the proportion of children living in households below the poverty threshold of PPP \$2.15 per day is greater than the proportion of the total population living in poor households, i.e. children in all 14 countries have a higher probability of living in income poverty than the rest of the population (figure 2.1 on page 26).

Figure 2.1 also shows clearly the large differentials in poverty rates across the SEE/CIS countries. Poverty levels are highest among both adults and children in the

countries with the lowest national per capita income, and for the most part, with the highest child shares in their total populations: Moldova, the Caucasus, and most of the countries of Central Asia. In all of these countries, child poverty rates exceed 50 per cent, a level which is considerably higher than the next worst performing country, Albania, and up to 10 times the rate calculated for some Balkan countries. However, it is important to remember that Russia, although it has a low child poverty rate, is home to a very large share of the region's poor children. In Russia the child poverty rate is 13 per cent, but the number of children under 15 who are poor is 3.3 million, corresponding to about 20 per cent of the total number of poor children in the SEE/CIS region: the danger has to be avoided that the 'low' rate of child poverty in Russia in relative terms detracts from the size of the problem. Uzbekistan, on the other hand, has a large child population and a high child poverty rate: the estimated number of poor children is 4.8 million or slightly more than 25 per cent of the total number of children living in income poverty in SEE/CIS. Russia and Uzbekistan together account for circa 45 per cent of all poor children in the region.<sup>3</sup>

### Varying the income poverty line: children are more vulnerable whatever poverty line is chosen

The PPP \$2.15 poverty line in SEE/CIS corresponds roughly to the average minimum expenditure required to cover the cost of a very meagre food basket, and a minimum allowance for heating, lighting and essential non-food products.<sup>4</sup> The very frugal nature of this subsistence basket means that the income poverty estimates derived using this poverty line can be considered a measure of those living in extreme poverty.<sup>5</sup> National subsistence minimums are arguably more appropriate measures of well-being for the purposes of policymaking, because they are set by national governments which can in principle take into account the specific national context and local consumption patterns when determining minimum consumption requirements. National subsistence minimums should therefore better represent the "adequate standard of living" referred to in Article 27 of the Convention on the Rights of the Child.

Table 2.1 on page 26 shows estimates of poverty for the total population and for children according to national subsistence minimums in three countries. Given that the national poverty thresholds are in general higher than the PPP \$2.15 per day poverty line, and in the case of Russia considerably higher, it is obvious that the percentages living in poverty are also higher. However, as with the PPP \$2.15 threshold, child income poverty rates are always higher than the average poverty rates for the total population.

Any poverty line represents a somewhat arbitrary cut-off between those who are poor and those who are not. In practice there may be many adults and children

## Box 2.1

### Measuring income poverty among children: choice of welfare indicator, equivalence scale, poverty line

The widely used, and seemingly straightforward, poverty headcount estimates (or poverty rates) such as those reported in this study – the share of the child population living below a given poverty line – need to be interpreted with care, in that the calculations behind them involve many complex choices and assumptions, all of which can influence the results obtained. For this reason, a brief summary is provided here of the main choices and assumptions made to estimate child income poverty in this study.

Three main choices are involved in the calculation of the poverty estimates: (1) the choice of the aggregate welfare indicator (used to measure individual income or expenditure levels, and rank individuals either above or below the poverty line); (2) the choice of equivalence scale (whether and how to account for economies of scale in a household as well as different consumption needs of household members when calculating individual per capita income levels);<sup>i</sup> and (3) the choice of poverty line. The choices and assumptions made in this study are totally compatible with those made in World Bank (2005a), which means both that the results quoted in this study are comparable with the World Bank results, and that this study was able to draw on the data used in the 2005 World Bank study.

The choices made for this study are the following.

(1) **Aggregate welfare indicator:** In this study, individuals – adults and children – are ranked on the basis of their per capita consumption expenditure. The term 'income poverty' used in this analysis refers to per capita household consumption expenditure expressed in money terms. This follows the example set by previous studies of poverty in the region,<sup>ii</sup> which find that data on income are often under-reported in household surveys, and that consumption expenditure tends to be a better indicator of the material resources available to households. Income can be highly volatile, while consumption expenditure tends to be more readily smoothed over periods by individuals. This smoothing makes consumption expenditure a more reliable indicator of well-being than income, because it reflects more accurately the level of resources at any given time.

The consumption expenditure indicator adopted in this study is an aggregate totalling household per capita expenditure on food, services and non-durable goods, but excluding household expenditure on rent and mortgage payments, on health care, and on durables.<sup>iii</sup> The monetary value of consumption of goods own-produced or received from other households and institutions as a gift or in reciprocal exchange is computed using a consistent approach which imputes for those products their median local price. Finally, in order to compare the welfare of households in different areas of a country, and to arrive at national estimates, deflators are used to take into account the different levels of prices among different regions, and rural and urban areas within a country.

(2) **Equivalence scale:** Use of household data to calculate individual income or consumption levels. Data on income or consumption expenditure are collected for the household, but in order to rank individuals as living below or above the poverty line, it is necessary to convert these *household* data to *individual* data in per capita terms. This involves making assump-

tions about how resources are shared within the household.<sup>iv</sup> If household consumption expenditure is divided by the number of household members – the simplest way of converting the data to the individual level – the underlying assumption is that resources are distributed equally among all the household members, that all of them need the same amounts of resources irrespective of their age or other characteristics, and that all members have the same material standard of living. Another fundamental implication of this choice is that there are no economies of scale the larger the household. However, some researchers would argue against this, and make different assumptions: for example, that a household with two adults and two children needs fewer resources than a household with four adults, since children consume less; or that a household with four persons would need rather less than double the resources of a household with two persons in order to achieve the same standard of living, since larger households can benefit from economies of scale in household expenditure, for instance on housing, utilities and durables.<sup>v</sup> As stated above, for the purposes of this study of child income poverty in the SEE/CIS region, the assumption is that household resources are distributed equally and that there are no economies of scale. This assumption is justified since in this study, the welfare aggregate is based on household consumption of food, services and some non-food products, and excludes those items of household expenditure where most economies of scale could be achieved, namely housing and consumer durables. This study also assumes that children do not necessarily consume less than adults; or if they consume less of some items, they add to household expenditure on others (such as health, clothes or education costs).

(3) **Poverty lines:** Once individuals have been ranked according to consumption expenditure levels, it is necessary to establish the cut-off point below which they are considered poor. For comparison between countries in the region, income poverty is measured in this study using a threshold of current household consumption expenditure of PPP \$2.15 per person per day, with the dollar amount converted into national currencies using Purchasing Power Parities (PPP) – exchange rates constructed to take account of the real cost of living across countries.<sup>vi</sup> The assumption is that a dollar converted at purchasing power exchange rates should buy roughly the same quantity of goods and services in all countries. This poverty threshold is used extensively by the World Bank in its analyses of poverty in the region, where it is argued that it is preferable to the more common PPP \$1 per day line, as it corresponds roughly to the average cost of a minimum – meagre – food basket, plus the approximate costs of meeting the minimum heating, clothing and transport requirements of households in the region. In cold climates, warm clothing is an essential, and children often have to have their clothes replaced every year. In the words of World Bank (2005a), however, the PPP \$2.15 poverty line is based on the cost of a very “frugal bundle”; with food representing circa \$1 per day, heating and lighting representing \$0.25–\$0.50 and the rest going on clothes and transport. It is in fact a measure of extreme poverty.

National poverty lines set by individual governments are also used in this chapter for some countries. They are usually higher than PPP \$2.15 per capita per day, and they are constructed to represent the minimum actually required to achieve a basic standard of living in the given country. Most countries in the region developed per capita subsistence minimums during the period of central planning, partly as a planning tool (to

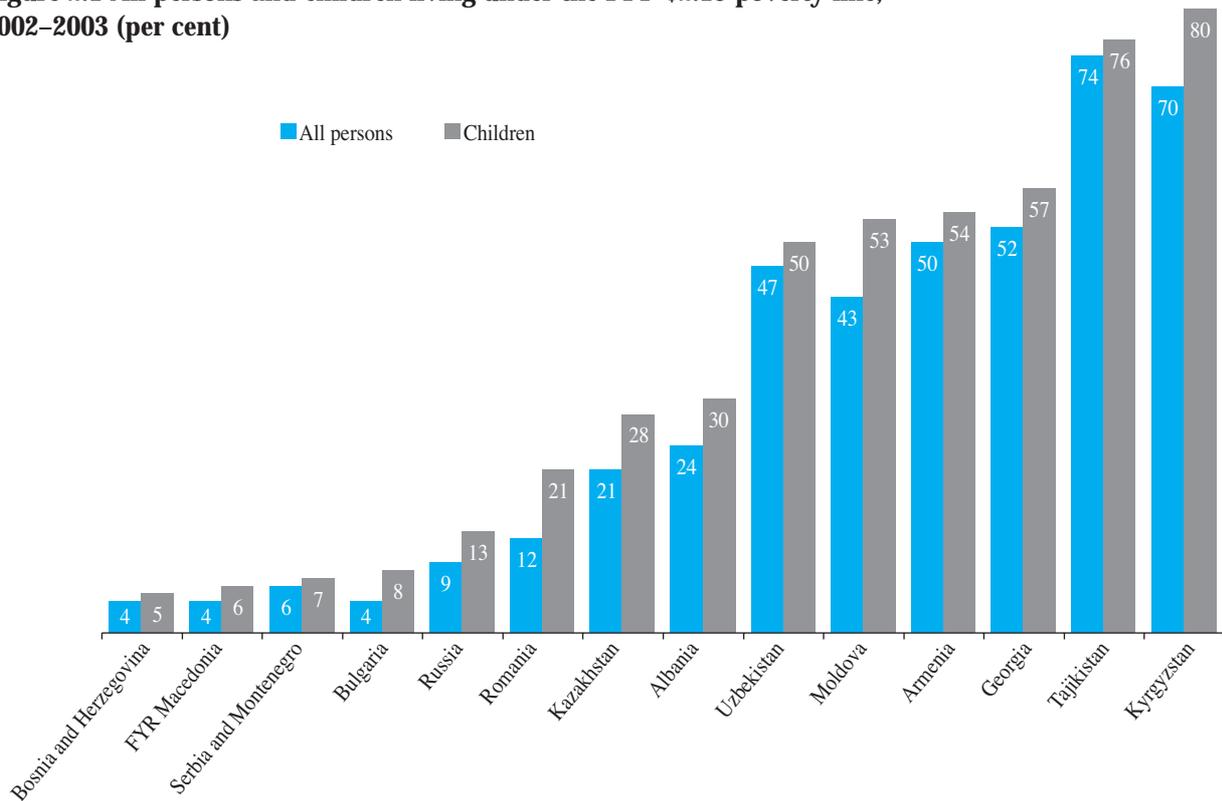
check whether centrally set wages were ensuring that all the population could achieve the centrally determined consumption norms, and whether wage differentials were being respected and kept within centrally established norms) and sometimes to establish the eligibility of households for social assistance.

Since the beginning of the 1990s, many countries in the region have tried to set new national subsistence minimums, but achieving consensus has proved difficult. Where subsistence minimums have been defined, they have tended to be based on a minimum food intake (usually corresponding to about 2,200 calories per day), which is costed at local market prices. A set amount is then added to the cost of this ‘food basket’ to cover other essential non-food expenses incurred by households. This amount usually equals 30–40 per cent of the food basket – in Albania, it is 38 per cent, and in Kazakhstan, it is 30 per cent. Whereas prior to the transition, subsistence minimums were often explicitly set at a relatively high level so as to measure the extent of exclusion from standard consumption norms, more recently they have tended to be set in relation to more basic minimum living standards. The specific needs of children have not generally been considered separately in the definition of subsistence minimums. Thus, where costs associated, for example, with sending children to school are high, this may not be fully reflected in the level of the subsistence minimum for a household with children. Here Russia is an exception, as box 2.2 explains.

#### Notes

- i The impact and implications of choice of measure of resources, equivalence scale and poverty line are discussed in greater detail in Menchini and Redmond (2006), with an application to survey data used to estimate child poverty in this report.
- ii See, for example, World Bank (2005a).
- iii These latter items are excluded because (1) housing costs are not significant in the region and there are difficulties in imputing the value of housing for households which own the dwelling where they live; (2) there are doubts regarding the reliability of health expenditure data, and doubts on whether higher expenditure on health necessarily implies a higher standard of living; and (3) consumer durable items are consumed over a long period of time. Inclusion of expenditure on them is misleading, because it represents a large one-off expenditure which would make the households appear better off. In other regions, this problem is usually dealt with by including the imputed value of the consumption flow (over years) associated with the one-off large expenditure on durables, but data limitations mean that this approach cannot be applied in the SEE/CIS region. The decision to exclude these items follows the practice followed by World Bank (2005a), pp. 223–225.
- iv On intrahousehold distribution of resources see for example Grogan (2004) for Russia; Baschieri and Falkingham (2004) for Tajikistan; Alderman et al. (1995); Middleton et al. (1997).
- v Lanjouw et al. (2004), for example, find that the conclusion on the higher risk of income poverty for children relative to the elderly in CEE/CIS countries is highly sensitive to the assumption made about household economies of scale. Menchini and Redmond (2006), restricting their analysis to five countries in the SEE/CIS region and using a consumption expenditure aggregate similar to that adopted in this study, find that changes in assumptions on economies of scale modify the main conclusions on the poverty levels of children relative to other groups only in one of the five countries.
- vi The latest (2000) PPP are reported in OECD (2003). For a discussion of the use of the 2000 PPP factors and their relevance for the region, see World Bank (2005a).

**Figure 2.1 All persons and children living under the PPP \$2.15 poverty line, 2002–2003 (per cent)**



Data refer to all persons and children aged 0–15 living in households where current household consumption is less than PPP \$2.15 per person per day. Data are calculated from Household Budget Surveys and Living Standards Measurement Surveys. See box 2.1 for further technical details on the calculation of poverty rates.

Source: World Bank (2005a), Appendix B, tables 2 and 4.

**Table 2.1 All persons and children under national subsistence minimums, 2002–2003 (per cent)**

	Albania	Moldova <sup>a</sup>	Russia
Value of the national subsistence minimum per adult (US\$ per day, PPP)	2.38	2.28	5.29
Value of the national subsistence minimum per child (US\$ per day, PPP)	2.38	2.28	5.25
Per cent persons below national subsistence minimum	26.8	49.6	62.8
Per cent children below national subsistence minimum	33.4	59.8	72.8

<sup>a</sup> For Moldova, the poverty line used is that calculated for the year 2002 by the Poverty and Policy Monitoring Unit (PPMU). The 2003 value is obtained by updating the 2002 line using the Consumer Price Index.

Data refer to all persons and children aged 0–17 living in households where current household consumption is less than the national subsistence minimum. Conversion of the subsistence minimum values in PPP US\$ is made by using 2000 PPP conversion factors, see OECD (2003).

Source: Information on national subsistence minimums from World Bank (2003a; 2004) and from Goskomstat of Russia (www.gks.ru). Calculations of adults and children with per capita household consumption expenditure below subsistence minimums derived from Albanian Living Standards Measurement Survey 2002; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003.

‘hovering’ near the poverty line in their daily existence, sometimes rising above it and sometimes falling below, and the numbers living under the poverty line could change dramatically with just a small change in the line. Figure 2.2 on page 28 provides more detailed information for five countries by showing how children are distributed across the expenditure deciles: each decile group in the figure contains a tenth of the total population, with the poorest 10 per cent on the left. If children were evenly spread across all decile groups, then each group would contain a tenth of all children. This is more or less the case in Tajikistan (except for the top decile group), where the vast majority of households contain children. In other countries, children are more concentrated towards the bottom of the distribution. For example, in Bulgaria, the bottom decile group contains 17 per cent of all children, and in Russia it contains 15 per cent. This heavy concentration of children at the bottom of the distribution suggests that for these countries in particular, children are always likely to be heavily represented among those living in income poverty, wherever the poverty line is drawn.

**Trends 1998–2003: numbers in poverty drop, but the relative probability of children being poor increases**

The absolute numbers of children under 15 years of age in income poverty in the region have fallen con-

## Box 2.2

### Subsistence minimum in Russia

The official Subsistence Minimum in Russia is both the national official poverty line and a reference for a series of social policy measures, including eligibility for family allowances, discussed in greater detail in chapter 4. It is designed to represent the cost of meeting specific food and non-food requirements considered necessary for people to maintain health and to conduct socially acceptable levels of activity, taking into account age, gender and geography.

The tradition of defining minimum budgets has been inherited from the Soviet period. The current subsistence minimum was adopted in 2000 with the Federal Decree No. 134-FZ: 'On the subsistence minimum in the Russian Federation'. In common with minimums of the Soviet era, this subsistence minimum has been developed on the basis of experts' judgements on what people's needs are, and without direct refer-

ence to people's actual consumption habits (for example, as recorded in nationally representative household budget surveys). Subsistence minimums for children are constructed from a special children's basket which includes several items judged to be important for children's development, including micronutrients. As a consequence, the Russian subsistence minimum is arguably more generous than those in neighbouring countries developed from household budget surveys. For example, food comprises only about half of total expenditure in the Russian subsistence minimum, in comparison with 60–70 per cent in countries such as Albania, Armenia and Kazakhstan. Its average value in PPP terms was about \$5.20 in 2003, one of the highest in the region. The average value of the children's minimum is almost as high as that for adults. The table shows that according to this measure over half of all Russian children were estimated to be living in income poverty in 2003.

Another unique feature of the Russian subsistence minimum is the considerable leeway that local administrations, or oblasts, have in determining the subsistence minimum for their area, in spite of having to follow federally imposed guidelines for nutritional and other consumption norms for different classes of people, and to take account of local climate and geographical position. This local autonomy in determining subsistence minimums has been criticized by Ravallion and Lokshin (2006), who argue that it reduces comparability across oblasts – subsistence minimums in two different oblasts can refer to two very different standards of living.

**Subsistence minimums and poverty rates for children and working-age persons in Russia, 2003**

Oblast	Children (aged 0–15)		Working-age persons (aged 16–59)		Ratio of child to working-age subsistence minimum
	Subsistence minimum (roubles per month)	Poverty rate (per cent)	Subsistence minimum (roubles per month)	Poverty rate (per cent)	
Shakalin (high nominal subsistence minimum)	3,663	62.6	4,075	52.9	0.90
Tambov (low nominal subsistence minimum)	1,631	60.0	1,793	41.8	0.91
Moscow city	3,032	61.0	3,629	49.3	0.84
St Petersburg city	2,353	41.3	2,948	26.8	0.80
Total Russian Federation	2,119	52.7	2,328	39.7	0.91

The expenditure aggregate used to compute the poverty rates includes expenditures on health, rent and durables. For this reason, poverty statistics for all Russia in this table are different from those provided in table 2.1.

Source: Russia NOBUS Survey and Goskomstat of Russia (for the subsistence minimums).

The table also shows the extent to which subsistence minimums and consequent poverty rates vary across oblasts in Russia. This shows that the proportion of children in poverty according to this definition is the same in Moscow, one of the richest parts of the country, as in Tambov, one of the poorest, suggesting that the absolute standard used to assess child poverty in Moscow is rather different from that used in Tambov.

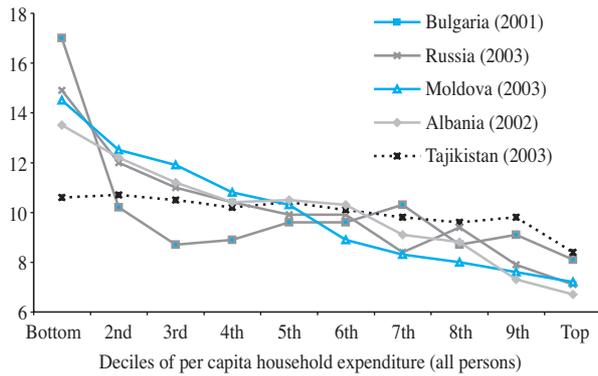
siderably in recent years, from an estimated 32 million to 18 million using the PPP \$2.15 per day poverty line.<sup>6</sup> These declining numbers partly reflect improvements in living standards, but also a considerable reduction in the child population in the region. While the overall population increased by circa 1 million in the 1998–2003 period, the number of children under 15 years decreased by circa 11 million. Despite the decrease in the numbers of children living in income poverty, one child in four in the region is still living in poverty, and the risk for a child of living in poverty relative to other age groups has actually increased.

Since 1998 households containing children in most countries of the region have experienced a smaller decline in their average income poverty rates than households without children. In Kazakhstan, for

example, income poverty among children fell by a quarter between 2001 and 2003, but among the elderly it declined by 40 per cent. In Kyrgyzstan, the difference was even more stark: households containing children experienced a 6 per cent fall in income poverty rates between 2000 and 2003, while households containing elderly persons enjoyed a decrease of 28 per cent. In Belarus, Bulgaria, Moldova and Uzbekistan too, the elderly gained relatively more than children in terms of income poverty reduction. These relative gains may be partly due to the relative priority attached to pensions in social expenditure.<sup>7</sup>

The reduction in the absolute numbers of children living in income poverty also masks differences in trends for individual countries, i.e. the reduction was not consistent throughout the region, and in some countries

**Figure 2.2 Distribution of children across deciles of household expenditure (per cent)**



Each decile group contains, by definition, 10 per cent of all persons in each survey sample. The bottom decile group has the lowest levels of expenditure. The lines in this figure show the percentage of children aged 0–17 in each decile group, where each line adds up to 100 per cent.

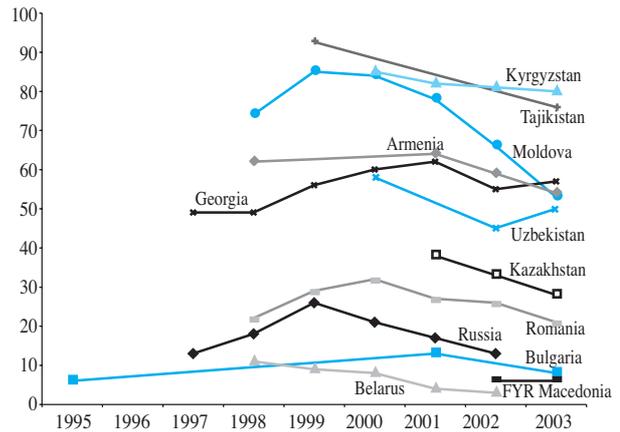
*Source:* Albanian Living Standards Measurement Survey 2002; Bulgarian Integrated Household Survey 2001; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003; Tajikistan Living Standards Survey 2003 (for a summary description of these surveys, see Technical Notes and Glossary on page 124).

there was no or only a very slight reduction. Figure 2.3 shows that in Moldova the proportion of children living in income poverty did indeed decline from 74 per cent to 53 per cent between 1998 and 2003. However, in Georgia the child poverty rate was significantly higher in 2003 than in 1998. In Uzbekistan, too, the proportion of children in income poverty rose between 2002 and 2003. In some countries declines in child income poverty were very small, as for example in Kyrgyzstan, one of the poorest countries in the region, and in Romania. By no means all children have been benefiting from the economic growth in the region.

Although economies have been growing, the differences in living standards between countries have not narrowed. Figure 2.3 shows that the differences in income poverty rates for children in the poorest and the richest countries of the region are in fact largely the same as, or even higher than, those which existed in 1998.

**To summarize:** The absolute numbers of children living in income poverty have declined, yet one in four children in the region is living in extreme poverty, and throughout the region children have a higher probability of being poor than adults. The latter finding holds whatever poverty line is used, because, in many countries of the region, children tend to be concentrated in the lower income deciles. There are large disparities in children’s probability of living in income poverty according to which part of the region they live in. Some countries in the region – Central Asia, except Kazakhstan, and Caucasus countries and Moldova –

**Figure 2.3 Children living under the PPP \$2.15 poverty line, 1990s–2003 (per cent)**



Details provided in note to figure 2.1.

*Source:* World Bank (2005a), Appendix B, table 4.

have more than half of their children living in income poverty, compared to less than 15 per cent in most SEE countries. Although Russia has a relatively low child poverty rate, almost 20 per cent of the region’s income-poor children live there. The economic growth experienced throughout the region has not benefited all children equally, and the large disparities between countries remain largely unchanged. At first glance it seems that economic growth has resulted in significant declines in child income poverty, but a closer look reveals that in some countries the decline was very slight, and the probability of children being poor relative to the risk of other population groups has actually grown, and the rate of decline for children in income poverty has been slower than for other age groups.

## 2.2 Child income poverty and household size: children in large households are particularly vulnerable

It was shown above (figure 2.2) that in those countries where children represent a smaller share of the total population, they tend to be situated towards the bottom of the distribution of household incomes. This is largely due to the kinds of households in which children live. Table 2.2 shows that the share of households with children and the average size of households can vary significantly between countries. In Bulgaria and Russia, children make up only a fifth of the total population, and households actually containing children account for a little more than one third of the total. In Tajikistan, on the other hand, children make up almost half the total population, and 9 in 10 households contain at least one member aged 0–17 years old. These differences in the size and distribution of children across households explain in part why in Tajikistan children are spread more evenly over the household income deciles than in Bulgaria and Russia.

### Box 2.3

#### Use of the absolute rather than the relative approach to studying child poverty in SEE/CIS

The analysis of income poverty in this chapter is based on an 'absolute' rather than 'relative' concept of poverty. National subsistence minimums, such as the Russian one described in box 2.2, represent 'absolute' poverty lines, in that the poverty threshold refers to a fixed amount of money needed to buy a minimum amount of food products and other basic needs in the country. Similarly the international PPP \$2.15 poverty line – which is the poverty line used most frequently in this study – can be considered, for the SEE/CIS region, an extreme absolute threshold, corresponding approximately to the cost of a very meagre food basket, plus an allowance for heating, lighting and other essential non-food items.

An alternative approach to measuring poverty is to use a 'relative' poverty line, which is unrelated to the cost of purchasing a minimum basket of essentials, but is rather set as a share of either the average or median per capita income or expenditure level for the country (for example the countries of the European Union use a relative poverty line which is set at 60 per cent of median income). Thus use of the relative concept of poverty means that individuals are ranked as living above or below a poverty line which is defined in relation to the average living standards of the community where the individuals live; whereas the absolute approach defines poverty levels in relation to the cost of a basket of basic goods and services considered the minimum required for survival, with the goods and services being costed using local prices.

While the absolute poverty threshold may seem more 'objective' in that it is based on a fixed minimum standard, there are in fact many arbitrary choices to be made in determining the absolute poverty line, not least the size and contents of the minimum basket of goods on which it is based: achieving consensus on national subsistence minimums is often difficult and politically controversial, as has been shown by the experience of some countries in the SEE/CIS region in the transition period.

The relative approach to measuring poverty levels is used by Bradbury and Jäntii (1999) in their study of child poverty in rich countries, referred to in chapter 1

of this report. Relative poverty lines are considered more suitable for OECD countries, since citizens in these countries are generally guaranteed a standard of living which satisfies basic needs, and the relative approach can better capture the exclusion experienced by those unable to achieve a standard of living close to the average for the country.

In the context of the SEE/CIS region, however, the use of relative poverty lines is more problematic: for countries where a large share of the population still cannot meet basic necessities, the relative measure does not capture the extent of material deprivation. In periods of economic instability the interpretation of trends in relative poverty can also be prob-

lematic. Since the relative poverty measure to some extent reflects and captures levels of inequality within the country, its use for the purpose of international comparison can lead to misinterpretations of the extent of income poverty. And in large countries with significant subnational regional differences (such as Russia for example), a relative poverty line set as a share of the median income for the whole country may not reflect local perceptions of adequate living standards or of social exclusion (for example, average consumption norms and consumer expectations in Moscow are very different from those in Dagestan).

If used for the study of child poverty, the relative approach may also require further refinement, especially in those countries of the region with a low share of children in the overall population, for example Russia, where families with children tend to have lower per capita income. In these countries, a relative poverty line set as a share of the median income or consumption expenditure of the whole population will not take into account that the median for households with children is much lower. For this reason, a relative poverty line used to estimate relative child poverty rates would be better set relative to the median per capita income or consumption expenditure rate for children, not the overall population.

Relative poverty rates for children are reported for five countries in the table, using a poverty line set at 60 per cent of the median expenditure of the whole population (1st row) and of all children (2nd row). In 2003, Tajikistan had a child relative poverty rate of 18.2 per cent, compared to 76 per cent of children estimated to be living in absolute poverty, i.e. living in

household with a per capita consumption lower than PPP \$2.15 a day. The children living in relative poverty in countries like Tajikistan not only experience absolute poverty but also they are in danger of exclusion from goods and services that even many poor people take for granted.

Russia and Bulgaria report the highest relative poverty rates, followed by Moldova. The rankings do not change too much if the relative poverty line is set relative to the median expenditure of the whole population or only of all children. The low level of relative poverty for children in Albania could indicate a greater degree of homogeneity in per capita expenditure levels among families with children in this

country. On the other hand, the higher level of relative poverty in Bulgaria appears to confirm results reported elsewhere in this chapter, which point to marked inequalities between regions and population groups within the country.

While the relative approach to measuring and comparing poverty levels is suitable for European Union countries, for the reasons given above, and also because they represent a reasonably homogeneous group of countries, it is not considered suitable for the study of child poverty in a very heterogeneous region such as SEE/CIS. It should at best be used to complement the absolute approach, and if used requires clear and detailed explanations of the results for each country.

**Child relative poverty rates (per cent)**

	Poverty line set as 60 per cent of median consumption of:	
	whole population	children
Albania (2002)	19.0	13.5
Bulgaria (2001)	25.6	23.6
Moldova (2003)	24.5	17.1
Russia (2003)	26.0	20.6
Tajikistan (2003)	18.2	16.8

Poverty data for children aged 0–17 living in households where current household per capita consumption is less than 60 per cent of the national median per capita consumption of the whole population (1st column) and of all children (2nd column). The median per capita consumption is derived from the household survey data.

Source: Albanian Living Standards Measurement Survey, 2002; Bulgarian Integrated Household Survey, 2001; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003; Tajikistan Living Standards Survey 2003.

**Table 2.2 Child population (0–17 years), average household size and child poverty**

	Child population as per cent of the total population	Households with children as per cent of total households	Average household size (persons)	Child poverty rate (PPP \$2.15), per cent
Albania (2002)	35.3	71.5	4.3	26.8
Bulgaria (2001)	19.5	36.3	2.9	12.1
Moldova (2003)	25.2	39.1	2.5	55.6
Russia (2003)	20.0	36.9	2.6	16.3
Tajikistan (2003)	46.4	88.6	6.4	70.6

The child poverty rates refer to the percentage of all children aged 0–17 living in households where current household consumption is less than \$2.15 per person per day.

Source: TransMONEE Database and household survey microdata (see figure 2.2).

Table 2.3 presents more detailed information on household composition and income poverty for Russia and Tajikistan. The two countries differ greatly, not only in terms of the share of children in the total population, but also in terms of the kinds of households that children live in. In Russia almost half of the population live in households without any children, and few live in households with three or more children (about 4 per cent of the total population and just over a tenth of all children), compared with very large proportions in Tajikistan (circa 70 per cent of the total population, and over 80 per cent of all children). But common to both countries are the extremely high rates of income poverty in large households; poverty rates tend to increase with the number of children living in the household. In Russia, the increase in poverty rates is particularly steep, rising to 40 per cent or more among households with three or more children.

Across the region, countries with lower shares of children in the total population tend to have child poverty patterns similar to those in Russia, while those with higher shares have patterns similar to those in Tajikistan. This has two important implications. First, the child income poverty rate is strongly related to the relative size of the child population, and the concentration of children in large households. Second, in every country, even those with low rates of child income poverty, children in large families are especially disadvantaged, implying that support to families with many children may be particularly effective in child poverty reduction.

As indicated in table 2.4, the reduction in the numbers living in income poverty since 1998 has not been evenly distributed among households of different sizes and structures, and there is evidence that children in large households are becoming more disadvantaged. In Romania, the percentage of households with three or more children in poverty actually increased. This is a group among which the Roma ethnic minority is over-represented, and Roma have substantially higher poverty rates than the rest of the population. Apart from the tendency to live in large households, the Roma minority has been disproportionately affected by trends of rising unemployment and shrinking social assistance since the onset of the transition.<sup>8</sup>

### The poverty risk for the very young

The relationship between children's age and their vulnerability to income poverty is also closely related to household composition. In general, the presence of a very young child can lead to a reduction in the resources available to the household, and increases the

**Table 2.3 Household composition and poverty in Russia and Tajikistan, 2003 (per cent)**

Number of children living in the household	Number of adults living in the household	Russia			Tajikistan		
		Proportion of all persons in each household type	Proportion of all children in each household type	Poverty rate (PPP \$2.15)	Proportion of all persons in each household type	Proportion of all children in each household type	Poverty rate (PPP \$2.15)
0	1	8.8	0	3.8	0.6	0	28.4
	2	20.6	0	6.9	1.1	0	28.9
	3 or more	18.3	0	8.1	2.7	0	52.0
1	1	2.9	7.4	9.8	0.3	0.4	27.7
	2	14.9	24.9	9.2	1.7	1.2	41.8
	3 or more	13.9	16.2	12.3	6.3	2.6	52.9
2	1	1.2	4.1	18.8	0.6	0.8	50.0
	2	10.9	27.3	16.4	4.0	4.3	48.6
	3 or more	4.6	8.7	20.9	11.2	7.5	65.9
3 or more	1	0.2	0.9	40.7	1.0	1.6	65.5
	2	2.6	7.9	34.1	21.2	30.7	69.6
	3 or more	1.1	2.7	43.3	49.3	50.9	75.7

The poverty rates refer to the percentage of all individuals in each household type living in households where current household consumption is less than PPP \$2.15 per person per day.

Source: Russia NOBUS Survey 2003; Tajikistan Living Standards Survey 2003.

household's income poverty risk, because often the mother will cut her working hours, or stop work altogether, to look after the infant. In countries with relatively large child populations, and where most children live with several siblings, such as Albania, Armenia, Kyrgyzstan and Tajikistan, differences in poverty rates between younger and older children are relatively small (figure 2.4). In Tajikistan, for example, where 19 out of every 20 children live with at least one sibling, the proportion of children aged 0–6 years living in income poverty is 74 per cent, compared to 69 per cent for children aged 7–14 years. In countries with lower shares of children in total population, on the other hand, for example Bulgaria, Moldova and Russia, where large proportions of children live in single child households (almost half of all children in the case of Russia), differences in poverty rates experienced by younger and older children are greater. In Moldova, there is a 10 percentage point difference between income poverty rates for younger and older children.

While figure 2.4 provides a 'snapshot', table 2.5 presents a longer term 'dynamic' perspective for Kyrgyzstan. This shows that, among children aged 4–6 years in 2001, only 20 per cent had never experienced poverty since 1998, while almost 40 per cent had spent the last four years in poverty. Children aged 7–13 years show similar poverty risk, and older children somewhat lower risk. Consistent poverty can have a severe impact

**Table 2.4 Relative changes in poverty by household composition, 1998–2003 (per cent)**

	Period of reference	relative changes in poverty by number of children in the household		
		No children	1 or 2 children	3 or more children
Bulgaria	2001–2003	–33.3	–28.6	–22.2
Romania	1998–2003	0	– 8.3	9.3
Belarus	1998–2002	–85.7	–80.0	–61.5
Moldova	1998–2003	–48.1	–30.9	–18.1
Russia	1998–2002	–33.3	–35.7	–15.6
Armenia	1998/99–2003	–15.0	–14.3	–3.0
Georgia	1998–2003	30.0	18.6	20.3
Kazakhstan	2001–2003	–44.4	–32.0	–14.8
Kyrgyzstan	2000–2003	–50.0	–11.1	–3.2
Tajikistan	1999–2003	–36.1	–27.4	–15.2
Uzbekistan	2000/01–2003	–25.0	–9.5	–11.1

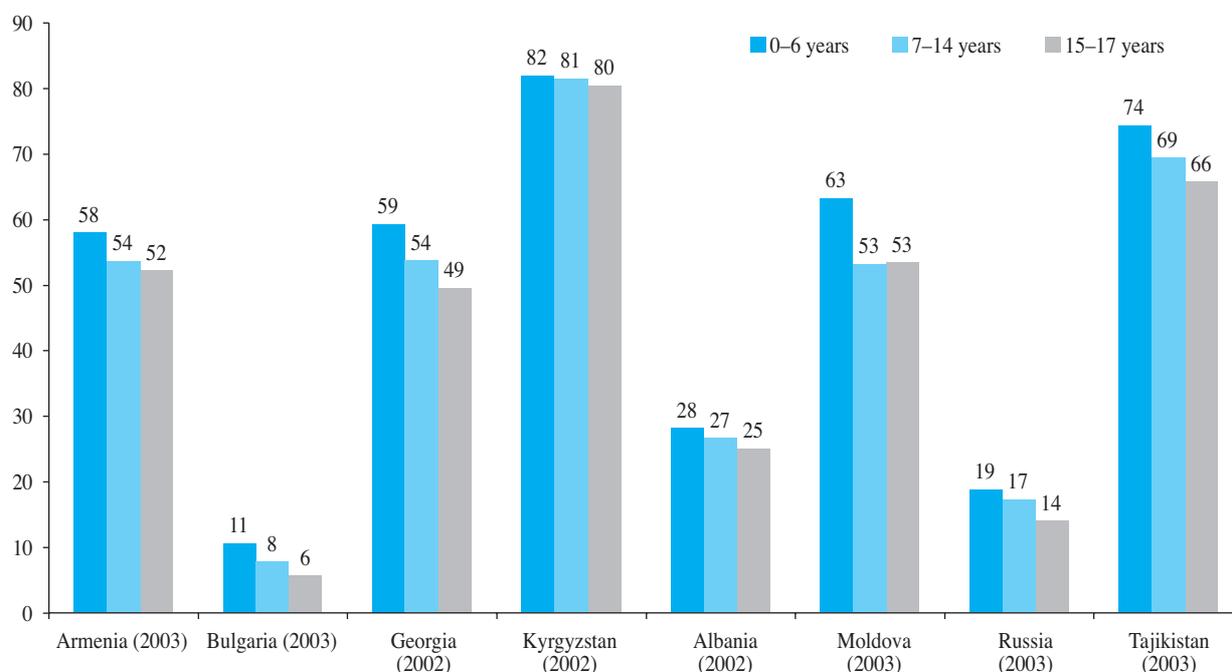
Data refer to persons living in households with a per capita consumption of less than PPP \$2.15 per day. The table presents the change in poverty rates in the period of reference as a percentage of the initial value.

Source: World Bank (2005a), Appendix B, table 4.

on development and well-being, in particular when experienced by very young children.

The World Bank (2005a) also shows that in the richer countries in the region, such as Bulgaria and Russia, households which contained very young children experienced lower levels of poverty reduction than

**Figure 2.4 Children living in poverty, by age, 2002–2003 (per cent)**



Data refer to the percentage of children, in each age group, living in households where current household consumption is less than PPP \$2.15 per person per day.

Source: World Bank (Europe and Central Asia) for Armenia, Bulgaria, Georgia and Kyrgyzstan, and Albanian Living Standards Measurement Survey 2002; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003; Tajikistan Living Standards Survey 2003.

households with older children. Households with more people in paid employment were perhaps best positioned to take advantage of economic expansion, while households with mothers who remained in the home may to some extent have lost out.

**Table 2.5 Poverty dynamics for children of different ages, Kyrgyzstan, 1998–2001 (per cent)**

Years living in poor household	Age in 2001			All children 0–17 years	Total population
	4–6 years	7–13 years	14–17 years		
Never poor	20	19	30	23	32
1 year	10	11	10	11	11
2 years	15	12	13	13	13
3 years	18	18	16	17	15
4 years	38	41	32	37	30
Total	100	100	100	100	100

Poverty statistics are calculated using the national absolute poverty line computed for 2001 and microdata from Kyrgyz Household Budget Surveys.

Source: Falkingham and Ibragimova (2005).

**To summarize:** Children in large households throughout the region have a higher risk of income poverty. In some countries there is only a small share of households with three or more children (for example, Russia), and while in others a large share of households have three or more children (for example, Tajikistan). But the poverty risk for such households is always greater than for smaller sized ones. Moreover, the poverty risk for households with three children has increased since 1998. In countries where large households dominate, the difference in the poverty rates for young (0–6 years) and older (7–14 years) children is more limited. However, in countries where the average family size is smaller, the difference between the poverty risks for the two age groups is far more notable.

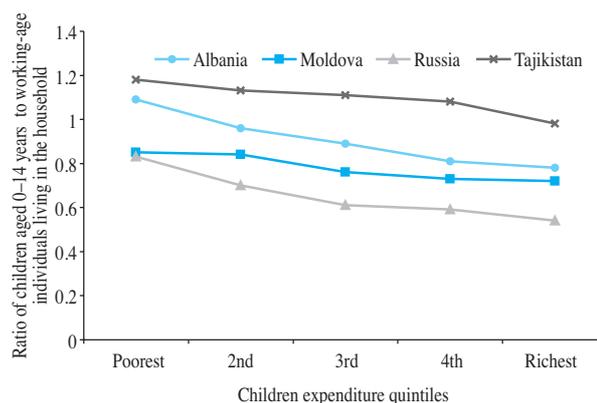
### 2.3 Child income poverty: the link with household dependency ratios and family structures

It has been argued above that children in large households are particularly vulnerable to income poverty. This section takes the analysis further to look not only at the number of children living in the household, but at the balance between adult and child members in the household, and in particular between wage-earners and dependants, in order to establish how these aspects of household composition influence the probability of children living in income poverty.

Survey microdata for Albania, Moldova, Russia and Tajikistan are used to look first at dependency ratios, defined as the ratio between the number of children and number of working-age individuals living in the household. The results show that overall the probab-

ity of being poor is higher for children living in households where there are a greater number of children for each working-age member. However, figure 2.5 shows that children in the poorest expenditure quintiles live in households with higher dependency ratios, but that the differences between quintiles are less pronounced in Tajikistan and Moldova. Again, this is due to the greater homogeneity in the size and composition of

**Figure 2.5 Average dependency ratio (children aged 0–14 years to working-age household members), by children expenditure quintile (around 2003)**



The dependency ratio is computed at the household level, as the ratio of the number of children aged 0–14 years living in the household to the number of household members aged 15–64 years. The expenditure quintiles are defined with reference to the child population only.

Source: Albanian Living Standards Measurement Survey 2002; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003; Tajikistan Living Standards Survey 2003.

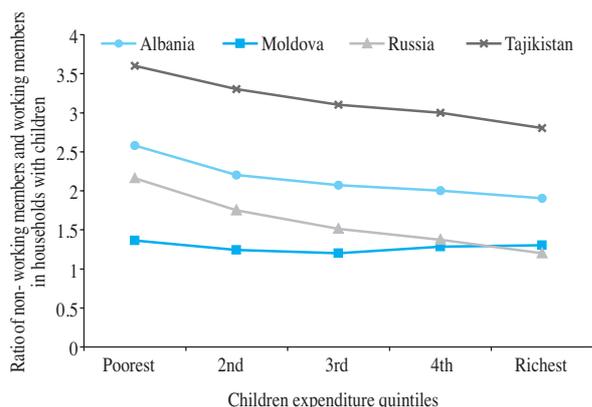
households with children in these poorer countries.

Another way of defining and measuring dependency is to look at the ratio between the number of non-working members and the number of members performing income generating activities. Income from work activity is usually the main source of revenue for families with children. Since 1998, during the phase of economic recovery, the rapid growth in real wages has made an important contribution to poverty reduction in the region, but as World Bank (2005a) pointed out, employment of adult members does not automatically protect households from poverty or even extreme poverty in the region.

Figure 2.6 shows that the number of dependants for each wage-earner decreases the higher the household expenditure level: the poorest children live in families with a higher number of dependants per worker than in the other expenditure quintiles. The decline is steepest in Russia, while in Moldova there is a more consistent ratio of dependants to wage-earners across quintiles, perhaps reflecting the relevance of labour migration

and remittances for the budgets of many households living in this country. However, some caution is required in interpreting these data because of the very broad definition of employment used here: for example, individuals who had worked at least one hour in the week preceding the survey are counted as workers.<sup>9</sup> Furthermore, information on employment status does not give any indication of work productivity and the

**Figure 2.6 Average dependency ratio (number of non-worker members for each worker member in families with children) by children expenditure quintile**



The dependency ratio is computed at the household level, as the ratio of the number of non-working household members to the number of household working members. The expenditure quintiles are defined with reference to the child population only.

Source: Albanian Living Standards Measurement Survey, 2002; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003; Tajikistan Living Standards Survey 2003.

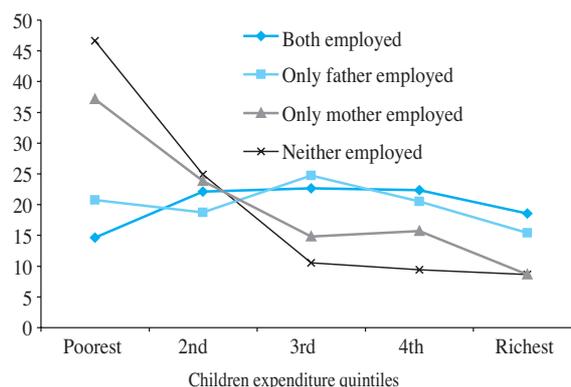
actual earning capacity of household members.

The data for Russia show clearly how the employment status of parents is correlated with the position of their children in the expenditure distribution spectrum. Figure 2.7 shows that in two parent and two children families, where both parents are unemployed, the children are, as expected, more likely to be concentrated in the poorest expenditure quintiles. And conversely, if both parents are employed the children are more likely to be in the upper three deciles of the distribution. Where only the mother is employed, the children are more strongly represented in the poorest quintiles, but where only the father is employed the children are more evenly spread across the distribution. The message is that two employed adults reduce vulnerability to income poverty in the family. Females have fewer opportunities to enter better-paid employment than men, largely because they tend to be concentrated in the lower-paid sectors.

The type of employment activity performed by adult household members, including the nature of the sector and the professional skill level and wages, has a sig-

nificant impact on household income levels. Apart from the low-paid public sector jobs, analysis of the data from household budget surveys shows that children in households where the adult members depend mainly on agriculture for income generation are at a higher risk of poverty. Agriculture is the main sector of employment and the most important source of livelihood of families with children in rural areas, and more

**Figure 2.7 Distribution of children (living in households with two children and both parents) in children expenditure quintiles by working status of parents in Russia, 2003 (per cent)**



The working status of parents is defined according to the ILO definition of employment. The expenditure quintiles are defined with reference to the child population only.

Source: Russia NOBUS Survey 2003.

than half of the children living in rural areas in Albania, Moldova and Tajikistan have fathers who are employed in agriculture. In Russia the proportion is approximately one in four, while there is a relatively high share of children whose father is not employed. Table 2.6 shows that children of agricultural workers living in rural areas have a significantly higher probability of being poor, particularly in Albania and Russia, where the poverty rate for this group is double that of children whose fathers work in other economic sectors. Those rural children whose fathers are not employed represent a much smaller share in the countries examined, but they also have a very high probability of living below the PPP \$2.15 a day poverty line.

### Family structure matters

The nuclear family composed of parents and their children, and without any other adult members, is the most prevalent family arrangement in the region. Extended families, containing more than two generations or more than one nuclear family, are also common, particularly where the rural economy predominates. Despite a long-term transformation in the region from extended to nuclear family structures – usually accompanying urbanization – a large number of children still live in

**Table 2.6 Child poverty in rural areas, by father's sector of employment (around 2003)**

	Albania		Moldova		Russia		Tajikistan	
	Per cent of children	Child poverty rate	Per cent of children	Child poverty rate	Per cent of children	Child poverty rate	Per cent of children	Child poverty rate
Father working in agriculture	52.9	36.2	53.2	66.4	26.1	26.8	53.4	75.4
Father working in other sectors of economy	31.2	18.9	17.6	52.9	35.2	13.1	25.9	66.4
Father not working	12.4	36.4	3.9	58.8	15.7	36.0	12.9	74.0
Father not present in the household	3.5	28.9	25.3	42.4	26.1	25.0	7.8	69.1

Poverty rates refer to children aged 0–17 living in households where current household consumption is less than PPP \$2.15 per person per day. The working status is defined according to the ILO definition of employment and the sector of employment is defined according to the definitions used in the surveys.

Source: Albanian Living Standards Measurement Survey 2002; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003; Tajikistan Living Standards Survey 2003.

extended, usually multigenerational, households. In all the countries, the extended family type is more common in rural than in urban areas.

In Bulgaria more than 4 children in 10 live in families which include at least one other adult, apart from their parents or siblings, older than 18 years. In rural areas this proportion increases to 6 in 10, and is higher in the villages in the west and in the south of the country. During the transition period Bulgaria also experienced an increase in the number of multigenerational families in the cities, where many newly-weds live with their parents as a way of coping with the growing economic difficulties, through achieving economies of scale in housing and other costs. In Tajikistan about 45 per cent of children live in extended families, while lower proportions are found in Moldova and in Russia, where the difference in family arrangements between rural and urban households with children is only modest.

In Moldova and in Russia, extended families with

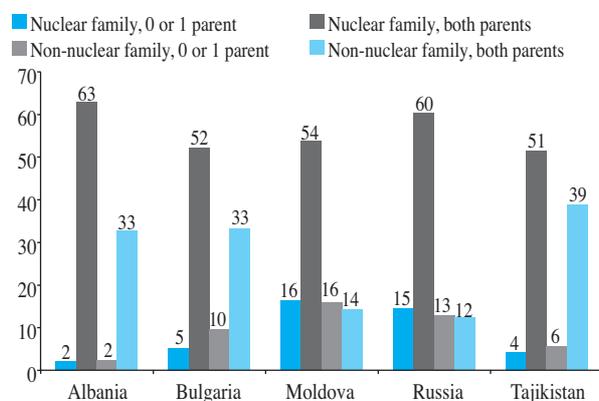
children are more strongly associated with the absence of one of the parents, in the large majority of cases the father. Here the extended family arrangement is partly a response to divorce, separation or widowhood; or to a parent's migration.

In Albania, less than 5 per cent of children live in a household where at least one parent is missing, and in Tajikistan about 10 per cent (figure 2.8). On the other hand, between one quarter and one third of children in Russia and Moldova grow up in incomplete families. In these latter two countries, the phenomenon is more prevalent in urban than in rural areas, but the underlying causes are different. In Russia, separation or divorce is the reason behind the absence of a parent for about half of the children living in incomplete families; the second most common cause is the death of one of the parents. In Moldova the main reasons for children living in households without one or both parents differ in rural and urban areas. In urban areas, as in Russia, divorce or separation is by far the most common reason. In rural areas, on the other hand, migration is the reason for the absence of one parent for about half of the children living in incomplete families.<sup>10</sup> The second most frequent reason is divorce or separation, which accounts for less than 20 per cent of all cases.

The relationship between type of household arrangement and child income poverty is not straightforward, but, overall, children living in non-nuclear families are more likely to experience income poverty than children living in nuclear families. In Albania, Moldova, Russia and Tajikistan the probability of children in extended families living in income poverty is 10 to 25 per cent higher than for children living in nuclear families. In Bulgaria they are almost 60 per cent more likely to live in income poverty (table 2.7).

Research in OECD countries shows that single parent families generally have a greater risk of poverty.<sup>11</sup> The most obvious reasons for this are loss of income and economic instability following divorce or a parent's death; the low earning capacity of the remaining par-

**Figure 2.8 Distribution of children by type of family arrangement, 2003 (per cent)**



Source: Albanian Living Standards Measurement Survey 2002; Bulgarian Integrated Household Survey 2001; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003; Tajikistan Living Standards Survey 2003.

ent; a low level of economic support provided by the state; social exclusion and discrimination. In the SEE/CIS region, there is some evidence to suggest that single parenthood was not a key determinant of child poverty in the pre-transition period. However, Klugman and Kolev (2001) report that in Russia, during the 1990s, income poverty among children living in incomplete families grew more rapidly than for children in two-parent families. Analysis of data for the four countries listed above does not provide a uniform picture (see table 2.7). In some countries children in single parent families actually seem to fare better in terms of income poverty. In order to better understand these results, it is necessary to look further at the reasons underlying the parent's absence.

As noted above, both Russia and Moldova have a high proportion of children who live in households where at least one of their parents is absent. The reasons for the absence of the parent(s) vary both between and within these countries, with divorce and separation being the most prevalent reason in Russia and in urban areas of Moldova, and labour migration being the main reason in rural Moldova. Aggregate results show that in the urban areas of Russia and Moldova, children living with both parents have a lower risk of poverty than those living without one or both parents. However in rural Moldova, the opposite is true. The results reported in table 2.8 shows that in Moldova, when the parent's absence is due to migration, the probability of the child living in income poverty is lower than for children in two-parent families. This suggests that remittance flows received from members of the household living abroad can lift many households (and especially single parent families) out of poverty. In Russia, it is worth noting that a considerable number of children with divorced or separated parents live in non-nuclear households, suggesting that versions of the non-nuclear family are used partly as a coping strategy by the remaining parent.

**To summarize:** Children in households where there is a higher ratio of children to working-age members have a higher proba-

**Table 2.7 Child poverty rates by type of family arrangement (per cent)**

	Nuclear families			Non-nuclear families			Non-nuclear/ nuclear poverty rates ratio
	0 or 1 parent	Both parents	Total	0 or 1 parent	Both parents	Total	
Albania	35.4	24.8	25.2	30.1	29.7	29.8	1.18
Bulgaria	–	10.7	10.2	20.4	15.2	16.4	1.61
Moldova	47.0	53.3	51.8	58.0	71.6	64.4	1.24
Russia	16.8	15.6	15.8	19.5	19.1	19.3	1.22
Tajikistan	60.5	67.9	67.3	72.5	75.1	74.7	1.11

Poverty rates refer to children aged 0–17 living in households where current household consumption is less than PPP \$2.15 per person per day.

– indicates that results are not presented due to the very small number of cases in the survey sample.

Source: Albanian Living Standards Measurement Survey 2002; Bulgarian Integrated Household Survey 2001; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003; Tajikistan Living Standards Survey 2003.

**Table 2.8 Child poverty by family structure, Russia and Moldova, 2003**

	Children distribution (per cent of children)		Child poverty rates	
	Nuclear families	Non-nuclear families	Nuclear families	Non-nuclear families
<b>Russia</b>				
Complete family (dual-parent)	60.3	12.2	15.6	19.1
Incomplete family (single parent)				
parent is single	1.3	2.2	21.7	28.8
parent is widow(er)	4.1	1.1	17.8	26.8
parent is separated or divorced	8.3	5.3	16.5	15.3
one parent is absent for other reason	0.7	1.2	–	19.3
both parents are absent (reasons not specified)	0.1	3.2	–	17.7
Total	74.8	25.2	15.8	19.3
<b>Moldova</b>				
Complete family dual-parent)	53.7	14.2	53.3	71.6
Incomplete family (single parent)				
parent is single	0.7	1.1	–	–
parent is widow(er)	3.3	0.8	57.0	–
parent is separated or divorced	4.6	3.8	54.2	65.6
at least one parent is migrant	7.4	4.4	38.2	54.2
one parent is absent for other reason	0.1	0.1	–	–
both parents are absent (reasons not specified)	0.1	5.6	–	51.2
Total	70.0	30.0	51.8	64.4

Poverty rates refer to children aged 0–17 living in households where current household consumption is less than PPP \$2.15 per person per day.

– indicates that results are not presented due to the very small number of cases in the survey sample.

Source: Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003.

bility of being poor, especially in countries where the share of the children in the overall population is smaller. The same is true for children in households where there is a higher ratio of dependants to working members. However, employment of adult members does not automatically protect children from income poverty, especially if the adults are employed in agriculture. Extended families are common in rural areas, but also appear to be a coping strategy for some urban residents confronted with housing shortages, and wishing to achieve economies of scale in housing costs. In Russia and Moldova, 25–30 per cent of all children live in incomplete families. In Russia, this is due largely to the high rates of divorce and separation, and also widowhood, as a result of the high rates of male adult mortality; while in Moldova it appears to be more related to divorce and separation in urban areas and to labour migration in rural areas. In rural Moldova, children in incomplete families, when one or both parents have migrated, have a lower risk of poverty than those in complete families, implying that remittances are helping to bring down poverty rates. The implication is that part of the reduction in income poverty rates achieved in Moldova since 1998 has been driven by the large inflows of remittances. However, there is a strong probability that child poverty reduction achieved through remittances has been achieved at the cost of increases in the number of children deprived of the family environment and parental upbringing necessary

for their emotional development.

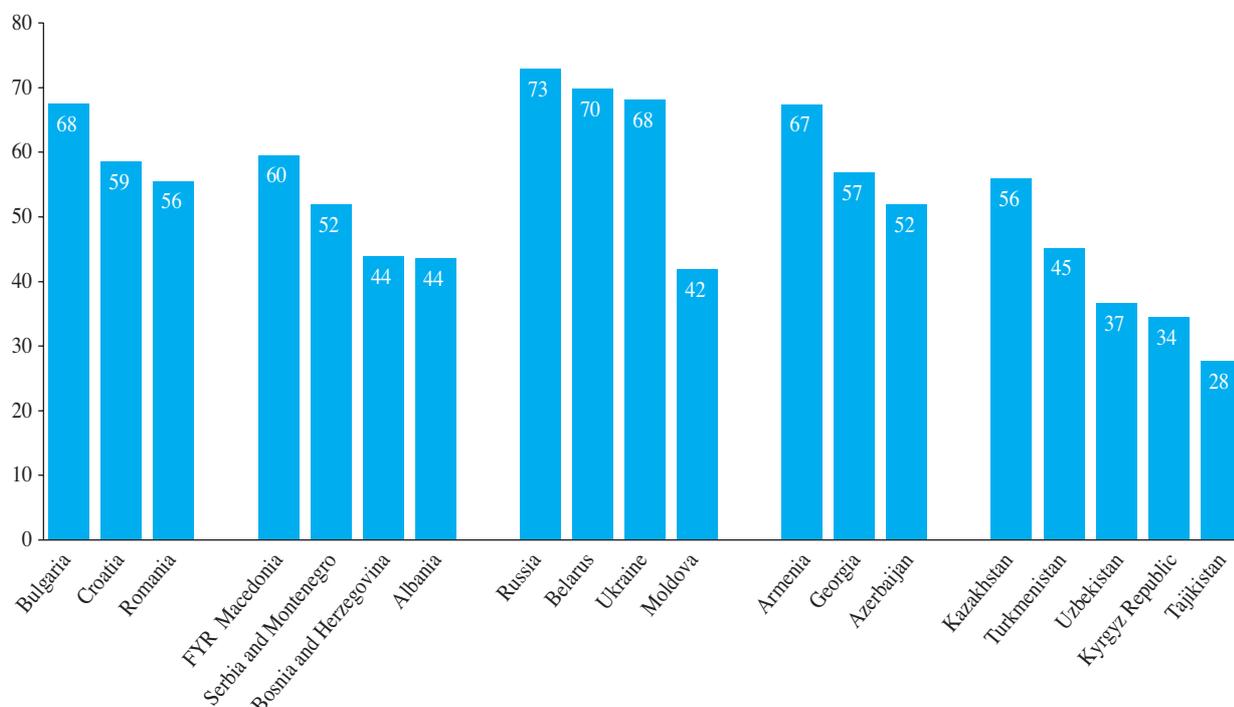
## 2.4 Urban, rural and regional patterns

Where children live will influence considerably their experience of poverty and well-being, and their life chances in most countries in the world. The countries of SEE/CIS are no exception.

### Urban and rural disparities

The distribution of the population between urban and rural areas in a country is often an important proxy indicator of both economic development and well-being across a number of dimensions. Figure 2.9 shows that the richer countries tend to have more people living in cities. World Bank (2006a) shows that, relative to their GDP per capita, the countries of the region are over-urbanized, and this is due mainly to their history of planned industrialization. Russia is the most urbanized country, followed by Belarus, Bulgaria and Ukraine. In all three countries of the Caucasus too, the proportion of the total population living in urban areas is relatively high. In Central Asia (with the exception of Kazakhstan), Moldova, Bosnia and Herzegovina and Albania, urban dwellers are less than half of the total population. The percentage of the workforce employed in agriculture is also high in these countries, and in some cases actually increased at the onset of transition.

**Figure 2.9 Urban population as a proportion of the total, 2002 (per cent)**



Urban population is the population living in areas defined as urban in each country and reported to the United Nations Population Division.

Source: World Development Indicators database.

**Table 2.9 Distribution of children by number of children living in the household in urban and rural areas, 2003 (per cent)**

		1 child	2 children	3 children	4 children and more	Total
Albania	Urban	17.4	48.7	22.7	11.2	100
	Rural	11.5	33.6	31.0	23.9	100
Bulgaria	Urban	39.8	48.3	8.4	3.5	100
	Rural	24.2	44.1	16.5	15.2	100
Moldova	Urban	44.7	42.9	8.7	3.7	100
	Rural	24.8	47.4	21.5	6.3	100
Russia	Urban	55.4	37.1	6.4	1.1	100
	Rural	33.5	46.6	14.1	5.8	100
Tajikistan	Urban	7.4	19.0	27.2	46.4	100
	Rural	3.1	10.5	20.7	65.7	100

The distinction between urban and rural area is based on national criteria as defined in each survey.

Source: Albanian Living Standards Measurement Survey 2002; Bulgarian Integrated Household Survey 2001; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003; Tajikistan Living Standards Survey 2003.

Children account for a larger part of the population in rural areas, while they are much less concentrated in urban areas and in particular in capital cities. For example, children in Romania accounted for 17 per cent of the population nationally in 2003, and their share in the population of Bucharest was only 13 per cent, while in several rural districts it often exceeded 20 per cent.<sup>12</sup> Table 2.9 shows that in Bulgaria, a little over one tenth of children in urban areas live in households with three or more children. In rural areas, on the other hand, a third of all children live in such large households. This pattern is repeated in all countries for which data are available, including in Tajikistan, where the majority of both urban and rural children live in large households.

In most countries, income poverty rates tend to be higher in rural than in urban areas. Data from World Bank (2005a) for Kazakhstan show that in urban areas, 13 per cent of people were living in poor households (and only 2 per cent in the capital city, Astana), compared with 31 per cent in rural areas. This pattern is reflected across the region for children too, which is not surprising, given the greater concentration of children in rural areas, and the greater concentration of households containing three or more children.

Yet, while child poverty overall is higher in rural than in urban areas (and lowest of all in capital cities), differences between children living in large households (with three or more children) in urban and rural areas are often considerably smaller (table 2.10), and in the case of Albania income poverty rates among children living in large households are the same in urban and rural areas, in spite of the greater average incomes that urban households enjoy. In Russia, the overall poverty

rate for children living in rural areas is more than double that for children living in urban areas other than the capital city. Among children in large households, the rural poverty rate is about one and a half times the urban poverty rate. In short, children in large families, no matter where they live, are highly vulnerable to poverty, but more so where regional income inequalities are high. In fact, poverty rates for children in large households in rural Albania are lower than those for children in large rural households in the much richer Russia, where inequality is higher, and Bulgaria, where differences are further exacerbated by the disparities in economic well-being between ethnic Bulgarian and other ethnic minorities.<sup>13</sup> Inequalities between urban and rural areas in Albania are not insignificant but they are considerably smaller than those observed in Russia and Bulgaria.

The World Bank (2005a) argues that one explanation for the fact that rural poverty has declined less than urban poverty since the late 1990s is that across the region most rural poor people's livelihoods are based on subsistence agriculture. During the economic crisis that followed the onset of the transition, the ability of rural families to produce food for their own consumption protected them to some extent from extreme poverty. This is part of the explanation for the strong growth in employment in agriculture which took place in several countries in the region during the early transition years of the 1990s,<sup>14</sup> when subsistence agriculture became in many cases a mechanism for coping with the loss of formal employment or other income-generating opportunities: a coping mechanism which many rural households may still be reluctant to give up in the face of continuing economic insecurity. However, it also means that

**Table 2.10 Poverty among children by place of residence (urban/rural), 2003 (per cent)**

	Child poverty rates			Poverty rates among children in households with 3+ children		
	Capital city	Other urban areas	Rural areas	Capital city	Other urban areas	Rural areas
Albania (2002)	18.3	21.9	30.3	40.2	41.7	40.1
Bulgaria (2001)	1.0	9.2	24.0	–	31.3	45.9
Moldova (2003)	29.3	56.9	61.3	34.3	66.7	73.7
Russia (2003)	4.0	12.7	26.6	–	29.0	44.2
Tajikistan (2003)	59.6	71.6	71.7	65.6	77.2	73.9

Poverty rates refer to the percentage of children aged 0–17 years living in households where current household consumption is less than PPP \$2.15 per person per day. The distinction between urban and rural areas is based on national criteria.

– indicates that results are not presented due to the very small number of cases in the survey sample.

Source: Albanian Living Standards Measurement Survey 2002; Bulgarian Integrated Household Survey 2001; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003; Tajikistan Living Standards Survey 2003.

the rural population often benefits less from economic growth, since they do not have the resources to improve the productivity of their farms, and cannot take advantage of the economic opportunities presented by growth to the same extent as their urban counterparts.<sup>15</sup> Moreover, much of the consumption which contributes to their living standards is not based on cash expenditure but on eating what they produce. In Bulgaria, for example, more than a quarter of the value of all consumption among rural households with children in 2001 was derived from the imputed value of home produce consumed by the households themselves, compared with less than one tenth of consumption among urban households with children. Similarly in Tajikistan (in 2003), where food accounts for more than two thirds of the total consumption expenditure of households with children in both urban and rural areas, self-produced foodstuffs accounted on average for more than 20 per cent of total household consumption expenditure in rural areas, compared with less than 5 per cent in urban areas. While the value of cash income, for example wages of employees, often increases with economic growth, the value of household food production may not. Indeed, the availability of employment opportunities may prompt rural children to leave school and take up paid work. There has been evidence of this happening in both Kyrgyzstan and Moldova in recent years.<sup>16</sup> Or it may prompt children's parents or adult siblings to migrate to where opportunities are more plentiful, leaving the farm more dependent on children's labour.<sup>17</sup> A report by the International Labour Organization (ILO 2002) states that the involvement of children in agricultural activities increased substantially in several countries of the region following the break-up of collective farms into family smallholdings. A survey of child labour in Ukraine found that in 1999 more than one third of rural children were working on household plots, with the highest share among children aged 10–14.<sup>18</sup>

When considering the prospects for achieving sustainable reductions in child poverty, it is important to remember that aggregate rates of economic growth tell us little about the quality of this growth. Growth based mainly on capital intensive sectors, such as energy and raw material exports, will not lead automatically to the revival of other economic sectors needed to boost employment and income for households. The wealth generated by energy exports tends to accrue to a small elite, with spin-offs for those involved in property or trade in large cities. Without a more favourable environment for domestic and foreign investment in other production sectors, inequalities will continue to grow, and children – particularly in rural areas as well as small regional towns – will remain vulnerable.

### **Regional differences in child population and child income poverty**

All countries covered by this study are divided into sub-

national units for administrative and other purposes. The number of levels depends on a variety of factors, including size of the country and population, degree of centralization of the government, and historical and other circumstances. Thus Russia has 89 oblasts, some with populations bigger than most of the countries in the region. Ukraine, with a smaller population and land area, has 25 oblasts, while Kazakhstan has 16 and Tajikistan has five. In all these countries, oblasts are further subdivided into smaller administrative units, but in this study it is the first level administrative units that are analysed.

Analysis at the subnational regional level is feasible because governments often produce statistics for their administrative entities. It is also important for two reasons. First, subnational regional analysis can identify those parts of countries performing particularly well or badly in terms of a range of indicators. There is considerable evidence, for example, that remote, mostly rural or mountain, regions tend to have worse results in socio-economic indicators than those close to large cities or international markets. Simple urban/rural analysis can hide these differences. Second, most subnational units have an administrative and financial function, and they often have separate budgets. In some cases, lower-level units are given considerable responsibility for the financing of services that are particularly important for children, such as education, health care and social assistance payments. Policy at the subnational regional level can be important for child well-being, as can national policies on the redistribution of resources among regions. In most countries, there is considerable variation in both the distribution of the child population and the distribution of indicators of child poverty.

Table 2.11 presents summary information on child shares in total population, and on the distribution of child poverty, at the subnational level for seven countries. The standard deviations are measures of dispersion in the two indicators, and the correlation coefficients are measures of the extent to which the two indicators are associated. In Ukraine, child population shares vary between 15 and 23 per cent of the total population in the capital city of Kiev and in the largely rural region of Transcarpathia. In Albania, they vary between 35 per cent in Korçe in the south-east of the country and 48 per cent in Kukes, in the mountainous north-east of the country. There are notable differences in the dispersion of both child population shares and poverty rates across the seven countries. These differences are significant, and need to be taken into account in the formulation of national policies aimed at confronting child poverty and reducing interregional differences in child well-being and opportunities. Heavier concentrations of children in particular regions or districts should trigger appropriate investment to ensure that they are not disadvantaged.

**Table 2.11 Dispersion and correlation measures for child population shares and child poverty rates, 2001–2003**

	Regional child population shares		Regional child poverty rates		Correlation coefficient between child population shares and child poverty rates (R <sup>2</sup> )
	National average (unweighted)	Standard deviation (mean = 0)	National average (unweighted)	Standard deviation (mean = 0)	
Albania (12)	39.6	3.6	29.4	7.7	0.73
Bulgaria (9)	19.6	2.0	12.2	8.4	0.24
Moldova (10)	26.4	3.7	59.8	13.5	0.13
Russia (47)	21.7	4.5	17.4	8.6	0.53
Ukraine (26)	18.9	2.1	33.0	7.5	0.25
Kyrgyzstan (8)	38.9	6.9	64.9	15.3	0.62
Tajikistan (5)	45.0	4.2	71.0	15.5	0.06

The numbers in brackets in the first column refer to the number of subnational regions from which statistics are calculated. The standard deviation is a measure of dispersion – the higher the figure, the larger the dispersion. In the standard deviations presented in the table, means are standardized to 0 to allow easier comparison across countries. The correlation coefficient is a measure of the strength of a relationship between two distributions. A strong positive relationship between the two distributions (where a high score in one distribution is associated with a high score in the other) will give a correlation coefficient of around 1.0. A strong negative correlation between the two distributions (where a high score in one is associated with a low score in the other) will give a correlation coefficient of around –1.0. Where there is no relationship between the two distributions, the score will be close to 0. Data for Albania and Ukraine show the relationship between child population and overall poverty rates. For these two countries, poverty rates are calculated using national poverty lines. For the other five countries, poverty rates are based on the PPP \$2.15 poverty line.

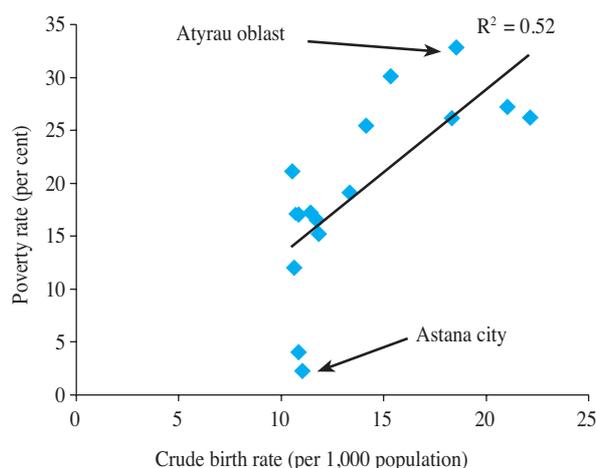
Source: Albanian Living Standards Measurement Survey 2002; Bulgarian Integrated Household Survey 2001; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003; Tajikistan Living Standards Survey 2003; TransMONEE Database.

Across the seven countries on table 2.11, child poverty rates also vary considerably, and are invariably lowest in the largest cities. In Russia, child income poverty rates range from less than 2 per cent in St Petersburg to over 50 per cent in the Republic of Tuva in the far east of the country. Such large differences, also evident in several other countries, suggest an enormous gap among regions and among districts, not only in living standards, but also in children’s life chances. The correlation coefficients show that in five of the seven countries for which data are available, there is a strong positive relationship between child population shares and child poverty. Where the child population share is high, the child poverty rate is also high. A similar relationship is illustrated graphically in figure 2.10 in the case of the 16 oblasts of Kazakhstan. The point representing Astana, the capital city, is in the bottom left of the graph, signifying both low birth rates and low poverty rates. The point representing Atyrau, in the west of the country, is in the top right of the graph, signifying both higher birth rates and high poverty rates. Most other oblasts lie in a rough line between these two. What is true internationally, that countries with high child population shares tend to have high child income poverty rates, is also true within countries.

In some countries, high child poverty rates can be attributed to specific local factors. In Bulgaria, only 1 per cent of children in the capital city, Sofia, live in households with per capita expenditure below the PPP \$2.15 poverty line, compared with 29 per cent in the region of Bourgass, in the south-east of the country. While the region of Bourgass has the highest child share in the population in the country, it is relatively well off in terms of average income. However, it contains a large concentration of people from the Turkish and Roma ethnic minorities, and it is children from these communities who are most likely to make up the majority of poor children in the region.<sup>19</sup>

Figure 2.11 shows that in Kyrgyzstan, the relationship between child population shares and child income poverty strengthened between 1998 and 2002. That is, while the overall rate of child income poverty declined in Kyrgyzstan, it declined least in those regions with the highest share of children in their populations. In the oblast of Naryn in the centre of the country, for example, where more than 80 per cent of people live in rural areas and where the child share in the population is greater than in any other region, the child poverty rate was already the highest in the country in 1998, and it declined less than in any other oblast. On the other hand, the rate of child poverty fell more than the

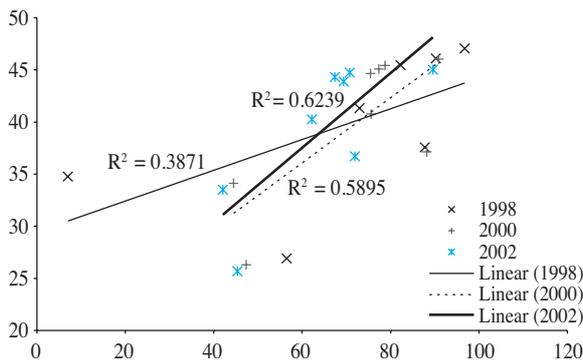
**Figure 2.10 The relationship between birth rates and poverty rates in the oblasts of Kazakhstan, 2003**



The poverty rates refer to overall population and are calculated according to the national subsistence minimum threshold. R<sup>2</sup> is the coefficient of determination; it ranges from 0 to 1 and is a measure of the strength of the linear association between two variables.

Source: TransMONEE Database.

**Figure 2.11 Changes in the relationship between children's share in the population and child poverty in the oblasts of Kyrgyzstan, 1998–2002**



The Y axis shows children's share in the population of different oblasts in Kyrgyzstan, while the X axis shows the child poverty rate in the oblasts, based on the national subsistence minimum. Child population data for 1998 and 2000 are interpolated.  $R^2$  is the coefficient of determination; it ranges from 0 to 1 and is a measure of the strength of the linear association between two variables.

Source: Falkingham and Ibragimova (2005); TransMONEE Database.

national average in Bishkek, the capital and largest city, between 1998 and 2002.<sup>20</sup>

**To summarize:** The highest child income poverty rates tend to be found in rural areas, and the lowest in capital cities, but large households remain vulnerable wherever they live. The vulnerability of children in rural areas is linked to the limited employment opportunities beyond subsistence farming, and the incomplete nature of agricultural reform. There are signs that regional disparities in child poverty rates have been growing within countries, suggesting again that the benefits of the post 1998 economic growth have been unevenly spread within countries and between households.

## 2.5 Summary and conclusions

Analysis of the trends in income poverty for the 1998–2003 period suggest that the number of children living in extreme income poverty, as measured using the PPP \$2.15 poverty line, has declined markedly. However, the differences in poverty rates between children in the poorest and the richest countries in the region, as well as between children in different regions within countries, have not changed substantially, or, in some cases, have become even greater. The gains for children have not always matched those experienced by adults and elderly people; and the improvements were not spread evenly between

younger and older children, or between households of different sizes. Those who had the highest poverty risk in the 1990s – young children, children with several siblings, children in rural areas, and children living in regions with high child population shares – have generally gained less than other children in terms of income poverty reduction in the years since 1998. In a few cases, they have not gained at all.

Child income poverty appears to be associated with the concentration of children in large households, and also with the concentration of children in certain regions within the countries. In several countries, the child poverty rate in capital cities is extremely low, and contrasts greatly with the high child poverty rates seen in some outlying and remote areas where birth rates and child population shares also tend to be higher. In richer countries with fewer children, younger children (aged 0–6) have a greater poverty risk than older children.

These results underscore the fact that children, being in most cases dependants, add to the needs and costs of a household, but generally do not contribute anything to the household's current economic resources. Thus the very presence of children can push a household into income poverty. But this is not by any means inevitable: it depends on parents' and other adults' incomes and earning power; and on the willingness or ability of the state to share with parents the costs of raising children. The extent to which social assistance and child benefits are available to help households with children is examined in chapter 4. Although there has been economic growth throughout the region since 1998, it has with a few exceptions not been sufficiently broadly based to guarantee productive employment and decent wages for most of the working-age adult population. In the case of Moldova, where it has been largely driven by remittances, children have gained in terms of material income, but have been deprived of parental upbringing in a complete family.

The above implies that differentiated policy responses will be required to promote 'pro-poor growth' and improve income opportunities for adult members of households, and that these will have to be complemented by improvements in the safety nets and public transfers for households with children. Adult employment opportunities could be improved in rural areas through the completion of agricultural reforms, as well as investment in rural infrastructure. Policy actions aimed at achieving more social inclusion for children of ethnic minority groups are also required in some countries. Poor children tend to be concentrated in countries and areas where the tax base is low, meaning that the income poor are also poorly served by

# 3 CHILDREN AND SOCIAL SERVICES

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While chapter 2 concentrated on unravelling some of the complexities of identifying children living in income poverty, this chapter examines other dimensions of child well-being and deprivation using aggregate and survey data to look in particular at deprivation in health, education and housing, and of upbringing in a family context.<sup>1</sup> Where possible, the analysis of these forms of deprivation is carried out with consideration of time, agency and the particular reliance of children on the state.

The study of outcome indicators shifts the focus away from the household and on to children, and to efforts by the state to provide social services which can guarantee equitable access and outcomes for all children. The Convention on the Rights of the Child (CRC) sets out the responsibility of the state in ensuring the realization of children's rights without discrimination of any kind, including the right to life and development (Article 6), the right to health and to access to health-care services (Article 24), the right to education of quality (Articles 28 and 29), and the right to an adequate standard of living, including adequate nutrition, clothing and housing (Article 27).

As discussed in the previous chapter, income poverty in the region has been falling since the late 1990s, although often less among children than among adults. The analysis in this chapter shows that this overall positive trend has not always been accompanied by improvements in other dimensions of well-being. This chapter, as well as the following one, argues that the

public resources generated by economic growth in each country – whatever the pace and level of growth – could be increased and better prioritized by governments to improve social services for children and material support to families with children.

Section 3.1 looks at the nature and extent of child deprivation in health; section 3.2 in education; section 3.3 in housing conditions; and section 3.4 at deprivation of parental care and family upbringing. Each section reviews the scale of the problem across the region, the current and potential long-term effects on child development, and government interventions. Where possible, survey data are used to look more closely at the extent to which there are overlaps between the different types of child deprivation and income, and also at the extent to which they are associated with household characteristics and place of residence. Section 3.5 summarizes and concludes.

## 3.1 Child health deprivation

In the pre-transition period the countries of SEE/CIS had attained impressive results in the field of child health – albeit with strong intraregional differentials – and had succeeded for example in lowering child mortality rates, immunizing virtually all children, reducing the incidence of acute malnutrition and micronutrient deficiencies and bringing major communicable diseases under control. Health policies aimed at ensuring universal entitlement to free health care were combined with parallel interventions aimed at improving access to

safe water and sanitation, and improving access and quality of education, all of which were inclusive in character and together contributed to reducing inequalities in health outcomes within countries.<sup>2</sup>

The Soviet health model, variations of which were adopted by other countries of the region, was funded by public resources and offered inpatient and specialist services as well as wide-scale public health interventions. There was broad geographical coverage, and investment in extensive public health infrastructure meant low barriers to access and a relatively high degree of equity in the system. The weaknesses of the pre-transition systems were related to their lack of efficiency and cost-effectiveness, due particularly to an excessive reliance on inpatient and specialist care. They also did not respond well to individual needs. And while there was a high degree of equity in access to basic services, there were also certain inequalities built into the system: superior facilities and services were available for the political and professional elite, with better quality and more individually tailored services. These privileges became more important in the late pre-transition period when health budget constraints led to increasing problems in providing a good quality of basic health services provision, while population demand and expectations with regard to public health care were growing. This was the case, for example, in the Soviet Union during the 1970s and 1980s, when health-care facilities continued to be formally free to all, but a lack of priority for health expenditure in the state budget brought a deterioration in the repair of the health infrastructure, and informal payments for individual treatment became more common. The slow progress in the reduction of infant mortality in Russia from the late 1960s onwards, after two decades of rapid improvement, was symptomatic of more general problems in updating and improving health-care provision – in this case, in the introduction of new equipment and new approaches to neonatology and perinatology.<sup>3</sup>

With the onset of the transition, the economic crisis led to further reductions in the financial resources available for the public health system, while the drop in the real value of salaries also acted as a disincentive for those responsible for providing the services. The previous weaknesses of the system became more apparent, and its main strength – universal access to public free health services – was compromised.<sup>4</sup>

However, despite the problems experienced by the health-care sectors, there was no major negative impact on the main indicators of child health status in most countries of the region, although progress in improving child health outcomes has slowed down in most of the region and differentials have grown.<sup>5</sup>

Economic recovery means that additional resources can now be made available – both at the household

level and that of the state – to improve child health outcomes and address equity issues. The mixed results presented in this section show that a firm policy commitment to looking at new ways of providing universal access to services, and tackling issues relating to equality and affordability, is still lacking, or is not backed up with appropriate resources and policy actions. Public policy should also be promoting awareness campaigns to ensure that all segments of society have access to basic facts of child health and nutrition. This section examines trends in key indicators of children's health and nutritional status, health-care interventions and public expenditure on health. Health outcome indicators are interlinked and influenced by several factors: some of them, such as nutrition status, are more connected to household incomes, knowledge and caring practices, while also being linked to the availability of public services (health care, provision of nutritional supplements, monitoring, etc.), and the quality of the basic infrastructure (for example access to safe water); others, such as child survival or general health status, depend more on the availability of public services (health care, immunization service), while also being influenced by household characteristics and family resources.

### Infant and early childhood mortality

Mortality rates are generally considered not only key indicators of child health and survival, but also of the efficiency and equity of public social services, and more broadly quality of life and socio-economic inequalities: “biases in economic arrangements are often most clearly seen through differential mortality information”.<sup>6</sup>

The intraregional differences in infant and child mortality, and in particular between subgroups of countries in the region, are striking (as shown in table 3.1). In 2003, the level of under-five mortality rates ranged from 102 per thousand in Turkmenistan to 7 in Croatia. The ranking of countries according to child mortality levels in the region follows that for child income poverty, confirming a broad overall association between child income poverty levels and mortality rates. The Central Asian and Caucasus countries have much higher mortality rates, followed by Western CIS and Albania, with the other SEE countries having lower rates. But there are at least two exceptions: Kazakhstan, which has a lower child income poverty rate than the other Central Asian countries, had an under-five mortality rate in 2003 which was higher than that of Uzbekistan and Kyrgyzstan. Russia and Albania have the same under-five mortality rates, although Russia has a much lower child income poverty rate. These are two important exceptions since they concern two of the most populated countries in the region.

From the late 1990s to the early 2000s, the countries in the region with higher mortality rates have experi-

**Table 3.1 Under-five mortality rates and child poverty**

	Under-five mortality rates (per thousand live births)				Child poverty rates 2001–2003	Yearly average rate of change of U5MR (%)	
	1990	1995	2000	2003		1995–2000	2000–2003
Turkmenistan	97	89	99	102	n.a.	2.2	1.0
Tajikistan	119	113	101	95	76	-2.2	-2.0
Azerbaijan	105	98	93	91	n.a.	-1.0	-0.7
Kazakhstan	63	67	73	73	28	1.7	0.0
Uzbekistan	79	75	71	69	50	-1.1	-0.9
Kyrgyzstan	80	74	70	68	80	-1.1	-1.0
Georgia	47	45	45	45	57	0.0	0.0
Armenia	60	49	37	33	54	-5.5	-3.7
Moldova	37	36	33	32	53	-1.7	-1.0
Albania	45	34	25	21	30	-6.0	-5.6
Russia	21	22	21	21	13	-0.9	0.0
Romania	32	25	22	20	21	-2.5	-3.1
Ukraine	22	24	21	20	2	-2.6	-1.6
Belarus	17	18	17	17	3	-1.1	0.0
Bosnia and Herzegovina	22	19	18	17	6	-1.1	-1.9
Bulgaria	19	19	16	17	8	-3.4	2.0
Serbia and Montenegro	26	19	16	14	7	-3.4	-4.4
FYR Macedonia	33	25	14	11	6	-10.9	-7.7
Croatia	13	11	8	7	n.a.	-6.2	-4.4

Child poverty rates refer to children aged 0–15 years living in households with per capita consumption lower than PPP \$2.15 a day. Countries are ordered by decreasing level of under-five mortality rate (U5MR) in 2003.

Source: Under-five mortality rates are from the World Development Indicators (WDI) database; child poverty rates are from World Bank (2005a), Appendix B, table 4.

enced either slow or no change, whereas the SEE countries have, on the whole, had better rates of improvement. But throughout the region the pace of mortality decrease for 2000–2003 has been slower compared to the 1995–2000 period,<sup>7</sup> and this has been coupled with a further widening of the differences between countries and subregions.

Infant and child mortality rates also provide evidence of significant and growing differentials within countries in child deprivation. For example, in Russia most of the 89 oblasts have infant mortality rates close to the national average (71 oblasts recorded rates lower than 15 per 1,000 live births in 2003), but the Republic of Tuva registers a rate which is more than three times that recorded for St Petersburg (table 3.2). Furthermore, disaggregated data from the TransMONEE Database show that infant mortality rates tend to be higher in oblasts with higher child income poverty rates, and that sub-national inequalities in infant mortality rates grew steadily throughout the 1990s.<sup>8</sup> Strong differentials can also be found in other countries of the region.<sup>9</sup>

In general, children in rural areas have a lower chance of survival. The 2002 Health Examination Survey data from Uzbekistan show that infant mortality rates in rural areas are almost double those recorded in urban

areas.<sup>10</sup> Similar patterns emerge from surveys carried out in Armenia, Kazakhstan and Turkmenistan.<sup>11</sup> Survey data also provide evidence confirming the link between levels of household resources and infant or child mortality rates. Table 3.3 shows that in Armenia, children living in households in the poorest wealth quintile are twice as likely to die before their fifth birthday as children in the richest quintile. The same pattern – although less pronounced – is found in Kazakhstan and Turkmenistan.

Child mortality data disaggregated by ethnic groups are scarce due to the lack of regular monitoring systems. However, fragmentary statistical information points to large differentials in under-five mortality rates: for example, mortality rates for Roma children in Romania at the end of the 1990s were three to four times higher than those for the rest of the child population.<sup>12</sup>

**Table 3.2 Infant mortality rates in selected Russian oblasts (per thousand live births)**

	1990	1995	2000	2003
St Petersburg city	18.0	13.8	9.5	8.0
Tyumen oblast	18.4	21.3	13.3	9.6
Tomsk oblast	18.3	21.2	19.5	17.2
Republic of Tuva	33.1	28.0	30.0	27.6

Source: TransMONEE Database.

**Table 3.3 Under-five mortality rate (per thousand live births) by household wealth quintiles**

	Poorest quintile	Richest quintile	Ratio poorest/richest
Armenia (2000)	60.9	29.6	2.06
Kazakhstan (1999)	81.9	44.8	1.83
Turkmenistan (2000)	105.5	69.8	1.51

Under-five mortality rates are calculated over the 10 years prior to the survey using data from Demographic and Health Surveys (DHS) (see [www.measuredhs.com](http://www.measuredhs.com)). The wealth quintiles are computed by using an asset index constructed on the basis of information on households' assets collected in the DHS.

Source: World Bank, Health, Nutrition and Population (poverty data), at [www.worldbank.org/hnp](http://www.worldbank.org/hnp)

### Box 3.1 Measurement challenges: child mortality

The use of child mortality indicators in the SEE/CIS region for the purposes of international comparison is problematic, partly due to data collection methods, and partly due to definitional issues. The data on under-five mortality rates reported in table 3.1 are drawn from the World Development Indicators (WDI) database of the World Bank. The main sources of these mortality data are national vital statistics registration systems, and direct or indirect estimates based on sample surveys or census data. The WDI data are 'harmonized' estimates of under-five mortality rates which take into account all available information and are obtained making use of statistical techniques developed and adopted by both UNICEF and the World Bank.

For some countries, especially in Central Asia and the Caucasus, these estimates differ significantly from the statistics provided by the national statistical offices for the TransMONEE Database, presented in the Statistical Annex of this report. For these countries the WDI estimates are based mainly on data collected through Demographic and Health Surveys (DHS), which use retrospective questions on maternity history and child survival. The national statistical offices, on the other hand, publish administrative data on births and deaths collected by local civil registration offices.

The graph shows an example of the discrepancies to be observed using these two different sources of data, showing the cases of one South-Eastern European country and a Central Asian country. While for Romania the estimates tend to coincide, this is not true, for example, for Uzbekistan and the other Central Asian countries. WDI estimates for Uzbekistan are weighted heavily towards survey data, while the data reported by the national statistical offices are from the national registration system.

The discrepancy in the results produced by the different sources has been discussed in detail in previous UNICEF research,<sup>i</sup> but is summarized briefly here since it remains a critical and largely unsolved issue in international comparisons of child well-being in the region, including in the monitoring of progress towards meeting Millennium Development Goal 4 (on the reduction of child mortality), particularly in the Central Asian CIS republics.

In the countries of the Caucasus and Central Asia, registry data tend to undercount cases of infant deaths for two main reasons: (1) infant deaths tend to be underreported by local health officials who fear they may be held responsible by higher authorities for high levels of deaths; and (2) civil registries in some countries charge fees for issuing birth and death certificates, which may discourage families from registering an infant death which occurs only a few days after birth. This is a problem particularly in rural areas (where transport costs can add to the cost), and when birth does not take place in a public maternity ward or hospital. Fees for

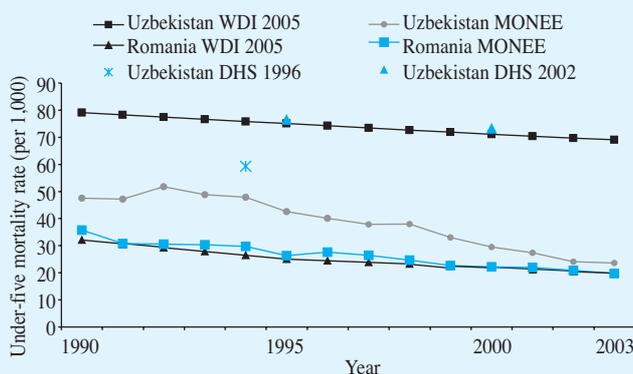
registering a birth were reported to represent 50 per cent of the average monthly wage in Tajikistan in 2001–2002, and a UNICEF survey found that only circa 25 per cent of all children under five years old (about 190,000) had been included in civil registers.<sup>ii</sup>

An additional factor accounting for the considerable discrepancy between register and survey mortality data has a definitional character: health officials in several CIS countries continue to use the definition of live birth used in the Soviet period, which differs from the standard World Health Organization definition. Reports suggest that this practice appears to continue even in countries where the official definition has been changed.<sup>iii</sup> The main difference is that, in the Soviet definition, infant deaths occurring within the first seven days of life are not recorded as infant mortality if the pregnancy ends at a gestation age of less than 28 weeks. Such cases were classified as miscarriages. For Uzbekistan, this definitional difference has been calculated to account for about one third of the differences in the infant mortality rate.<sup>iv</sup> In general, it has been estimated that use of the Soviet definition will produce an estimate which is 20 per cent lower than that using the WHO definition.

On the other hand, estimates based on survey data suffer from the fact that surveys are by nature a one-off snapshot of the situation in a country, and the accuracy of estimates depends on the sample size and design. In the first place,

sample sizes do not always allow surveys to correctly capture relatively rare events such as the death of an infant. Secondly, surveys are rarely carried out at regular time intervals and with the same methodology to allow trends to be monitored consistently. Thirdly, the questions on infant death usually refer to quite a long recall period and so they are subject to recall error. Moreover, since DHS standard estimates of infant mortality rates and under-five mortality rates refer to the five year or ten year period preceding the survey, it is difficult to judge the sensitivity of these rates to economic or poverty changes, which occur over a shorter period. Fourthly, as with income data derived from sample surveys, vulnerable subgroups such as the homeless, refugees, the Roma population, and children in institutions are not included, or at best are underrepresented, in household sample surveys.

**Discrepancies between estimates of under-five mortality rate data derived from different sources**



Source: TransMONEE Database; Demographic and Health Surveys (DHS) estimates ([www.measuredhs.com](http://www.measuredhs.com)); World Development Indicators (WDI) database.

#### Notes

- i See UNICEF (2003); Aleshina and Redmond (2005).
- ii UNICEF (2002b).
- iii World Bank (2003b).
- iv Analytical and Information Centre, Ministry of Health of the Republic of Uzbekistan, State Department of Statistics, Ministry of Macroeconomics and Statistics, and ORC Macro (2004).

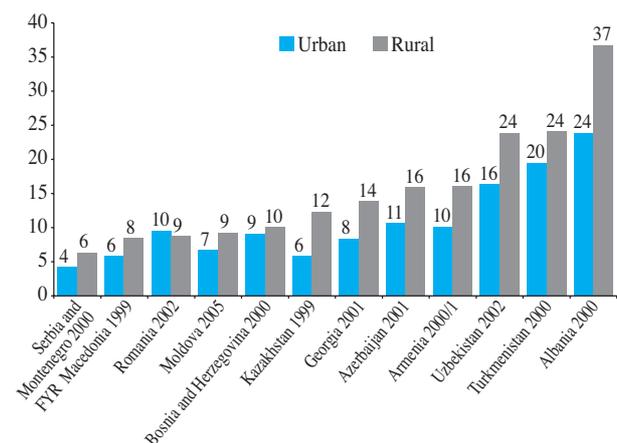
## Child nutrition

Sound nutrition is vital for children's current health, and also has a profound effect on their growth and development. Poor nutrition among children increases their vulnerability to infections and other diseases throughout childhood, adolescence and adult life, and can have long-term consequences on their intellectual, mental and social development.<sup>13</sup>

Undernutrition among children can be the result of insufficient food intake (both quality and quantity), disease, or poor quality of water and sanitation, or an interaction of these factors. The level of knowledge of nutrition issues among adults responsible for child care is also an important factor influencing a child's health and nutritional status. The World Health Organization considers the severity of malnutrition to be high when the prevalence of chronic undernutrition measured as stunting exceeds 30 per cent, underweight (reflecting current and past undernutrition) exceeds 20 per cent and wasting (a measure of current undernutrition) 10 per cent.<sup>14</sup>

Child nutrition indicators based on anthropometric measurements of children under five years old and collected through surveys are generally not systematically and regularly monitored in the region. Surveys are complex and expensive to conduct and have therefore often been part of international data collection projects, such as the Demographic and Health Surveys.

**Figure 3.1 Urban and rural prevalence of stunting among children under five (per cent)**



Data for all countries refer to children aged between 0 and 59 months, except those for FYR Macedonia which refer to children aged 6 to 59 months. Data for Georgia are representative of six regions. For the definition of stunting see the technical notes and glossary at the end of the Statistical Annex.

Source: WHO Global Database on Child Growth and Malnutrition; data for Moldova are from preliminary results of the DHS 2005.

Table 3.4 reports levels of stunting, wasting and underweight among children aged 0–5 for 13 countries in the region. Tajikistan, Uzbekistan and Albania show worryingly high prevalence rates, but even in other countries the three indicators exceed the 2.3 per cent level which, according to WHO, is considered normal in a healthy and well-nourished population. Subnational differences in the prevalence of undernutrition are also common, in particular in those countries where the overall level is high. Figure 3.1 shows stunting prevalence by urban and rural residence. Rural disadvantage is more visible in the Central Asian countries and in Albania, because of the interaction of factors such as food availability, nutritional practices and knowledge, and poor sanitation.

Micronutrients are as important as other nutrients for child development. A child's growth and immune function can be affected by vitamin A deficiency, while iron and iodine

**Table 3.4 Nutritional indicators for children under five years of age (per cent of children under five with given nutritional problem)**

	Stunting	Underweight	Wasting	Overweight	VAD	IDA	IDD (TGR)
Tajikistan (2003)	36.2	n.a.	4.7	n.a.	18	45	28
Albania (2000)	31.7	14.3	11.1	n.a.	n.a.	n.a.	n.a.
Uzbekistan (2002)	31.3	18.8	11.6	14.4	40	33	24
Kyrgyzstan <sup>a</sup>	25.0	11.0	3.0	n.a.	n.a.	n.a.	n.a.
Turkmenistan (2000)	22.3	12.0	5.7	n.a.	18	36	11
Azerbaijan (2000)	19.6	16.8	8.0	3.7	23	33	15
Ukraine (2002)	15.9	3.2	6.2	n.a.	n.a.	n.a.	n.a.
Armenia (2000/01)	12.9	2.6	1.9	6.3	12	24	12
Georgia (1999)	11.7	3.1	2.3	n.a.	11	33	21
Romania (2002)	10.1	3.2	2.3	2.3	n.a.	n.a.	n.a.
Moldova <sup>a</sup>	10.0	3.0	3.0	n.a.	n.a.	n.a.	n.a.
Kazakhstan (1999)	9.7	4.2	1.8	4.3	19	49	21
Bosnia and Herzegovina (2000)	9.7	4.1	6.3	n.a.	n.a.	n.a.	n.a.
FYR Macedonia (1999)	6.9	5.9	3.6	5.0	n.a.	n.a.	n.a.
Serbia and Montenegro (2000)	5.1	1.9	n.a.	n.a.	n.a.	n.a.	n.a.
Croatia <sup>a</sup>	1.0	1.0	1.0	n.a.	n.a.	n.a.	n.a.

<sup>a</sup> For these countries, data on stunting, underweight and wasting are from UNICEF (2006).

VAD = vitamin A deficiency; IDA = iron deficiency anaemia; IDD (TGR) = iodine deficiency disorders (total goitre rate). For the definitions of stunting, underweight, wasting and overweight see Technical Notes and Glossary on page 124. Countries are ordered by decreasing level of stunting.

Source: Data on stunting, underweight, wasting and overweight are from the WHO Global Database on Child Growth and Malnutrition; data on micronutrient deficiencies are from World Bank (2006b)

**Table 3.5 Child nutritional status by wealth quintile (per cent of children under five years old who are stunted or underweight)**

	Wealth quintiles					National average	Low/high quintile ratio
	Lowest	Second	Middle	Fourth	Highest		
<b>Stunting</b>							
Armenia (2000)	19.0	15.5	11.9	7.4	9.3	13.0	2.04
Kazakhstan (1999)	15.3	7.7	8.3	6.1	7.5	9.8	2.04
Kyrgyzstan (1997)	33.9	30.2	20.6	18.6	14.3	24.8	2.37
Turkmenistan (2000)	25.1	24.6	23.5	19.5	17.1	22.4	1.47
Uzbekistan (1996)	39.6	29.5	29.5	24.5	30.5	31.3	1.30
<b>Underweight</b>							
Armenia (2000)	3.4	2.7	4.1	1.2	1.5	2.6	2.27
Kazakhstan (1999)	5.1	4.0	3.6	3.0	6.1	4.2	0.84
Kyrgyzstan (1997)	12.9	12.5	13.8	5.9	8.1	11.1	1.59
Turkmenistan (2000)	13.0	12.8	9.5	12.7	11.5	12.0	1.13
Uzbekistan (1996)	25.1	23.7	12.7	15.0	12.9	18.8	1.95

The wealth quintiles are computed by using an asset index constructed on the basis of information on households' assets collected in the DHS.

Source: World Bank, Health, Nutrition and Population (poverty data), at [www.worldbank.org/hnp](http://www.worldbank.org/hnp)

deficiencies can lead to reduced mental development and impede educational achievement. In the region, only Croatia, Bosnia and Herzegovina, Serbia and Montenegro, FYR Macedonia and Bulgaria report satisfactory levels of iodine intake. There is evidence of mild to moderate iodine deficiency in all the other countries.<sup>15</sup> A survey in Ukraine in 2000 found that iodine deficiency was not limited to the western mountainous region and the northern area, close to Chernobyl, where deficiency was common even before the nuclear disaster of 1986, but that it was a nationwide problem.<sup>16</sup>

Concentrations of micronutrient deficiencies are particularly high in certain areas, such as the Aral Sea in Uzbekistan and Kazakhstan, where they are linked to the lack of safe water and poor sanitation. The Health Examination Survey carried out in 2002 in Uzbekistan found that over half of the children under three were anaemic – but only 20 per cent in the capital city, Tashkent – with a significant increase since 1996 for those aged 12–23 months.<sup>17</sup> The survey's findings also indicated that 53 per cent of children aged 6–59 months suffered from vitamin A deficiency, while earlier studies carried out in a district next to the Aral Sea had shown a level of about 40 per cent. Between one third and one half of young children in Azerbaijan, Georgia, Kazakhstan, Tajikistan and Uzbekistan suffer from iron deficiency anaemia.

The data presented in table 3.5 point to a strong association between levels of malnutrition and household wealth in some Central Asian countries and in Armenia. This could have policy implications, in that intervention to reduce malnutrition could be targeted using income or resource criteria. However, universal access to basic social services, combined with a set of generally affordable micronutrient interventions, can significantly contribute to improving children's nutritional and health status.

## Immunization coverage

Immunization is an important and cost-effective preventive health-care intervention which can substantially reduce child mortality and morbidity. It is usually entirely managed through the public health-care system, and rates and quality of immunization can also be considered important indicators of the level and efficiency of public health care for children: incomplete coverage or the so-called 'alarm signals' concerning national immunization programmes<sup>18</sup> point to weaknesses in the overall system of public health care for children.

Rates of immunization fell in many countries of the region, particularly the poorest ones, during the 1990s,

**Table 3.6 DTP3 immunization coverage, 2004**

	Best estimate of DTP3 coverage rate (per cent)	Per cent of districts reporting DTP3 coverage greater than 90 per cent	Number of 'alarm signals'
Bulgaria	95	93	10
Romania	97	100	2
Albania	97	100	0
Bosnia and Herzegovina	84	78	11
FYR Macedonia	94	87	6
Kosovo	93	100	6
Serbia and Montenegro	97	84	12
Belarus	99	100	4
Moldova	98	98	0
Russia	97	n.a.	6
Ukraine	99	100	4
Armenia	91	64	6
Azerbaijan	96	86	7
Georgia	78	61	7
Kazakhstan	82	n.a.	12
Kyrgyzstan	99	100	2
Tajikistan	82	91	6
Turkmenistan	97	100	4

DTP coverage is an estimate of the share of surviving infants who receive three doses of DTP (diphtheria, tetanus, pertussis) vaccine before their first birthday. The number of 'alarm signals' represents measures of concern about immunization systems, including geographical coverage of different types of vaccine, immunization safety, availability of ancillary equipment vital for effective vaccination, such as refrigerators, and strategies for publicity and communication to families on vaccination.

Source: UNICEF: Regional Indicator Framework for Immunization Plus 2005, UNICEF/WHO Joint Reporting Form; UNICEF Country Offices Annual Reports; WHO EURO Country Profiles on Immunization; Supply Division Mid-Year Feedback on Vaccine Procurement.

**Table 3.7 Poverty rates, under-five mortality rates, stunting and immunization, 1990s and 2003 (per cent)**

	Child (0–6 years) poverty rate		Under-five mortality rate		Stunting (low height for age)		Immunization (DTP3 coverage)	
	1998/99	2002/03	1995	2003	1998/99	2002/03	2000	2003
	Romania	22	21	25	20	13	10	99
Moldova	76	63	36	32	n.a.	8	91	98
Georgia	51	59	45	45	12	n.a.	80	76
Tajikistan	93	74	113	95	35	36	83	82

The poverty rates refer to the percentage of children aged 0–6 years living in households where current household consumption is less than PPP \$2.15 per person per day.

Source: For poverty data: World Bank (Europe and Central Asia); Moldova Household Budget Survey 2003; Tajikistan Living Standards Survey 2003. For mortality data: WDI database. For data on stunting: WHO Global Database on Child Growth and Malnutrition; Moldova DHS 2005 preliminary results. For data on immunization: UNICEF and WHO (2006).

but they had generally recovered by 2004, with the notable exceptions of Armenia, Bosnia and Herzegovina, Georgia, Kazakhstan and Tajikistan. However, the official figures on immunization coverage should be treated with caution. It is widely accepted that immunization rates were frequently inflated in the Soviet Union, and this practice may continue in some countries: for example, in 1999 in Azerbaijan, coverage of DTP3 (diphtheria, tetanus, pertussis) was reported to be between 87 and 97 per cent, depending on the area, but community-based survey results for the same year suggest that only 57 to 70 per cent of children were in fact immunized.<sup>19</sup> The high number of ‘alarm signals’ in Bosnia and Herzegovina, Bulgaria, Kazakhstan and Serbia and Montenegro also points to problems in the safety and reliability of the delivery system, or in the quality of the vaccines (see table 3.6).

Table 3.7 combines information on trends in income poverty, mortality, undernutrition and immunization coverage among very young children for four countries. In Tajikistan, where income poverty has declined since 1998, the under-five mortality rate has remained very high, as has the rate of stunting and the share of children not covered by the DTP vaccination. In Romania, on the other hand, there has been no significant improvement in child poverty rates, yet some improvements in under-five mortality rates and stunting, and DTP coverage remains high, though showing signs of slipping. These mixed results suggest that improvements in public health care for children have not always kept pace with improvements in economic growth rates and reductions in income poverty.

### Public expenditure on health and improving the delivery of health services

If society’s commitment to improving delivery of health services is measured by levels of public expenditure on health, the performance in the region is not good, or is at best mixed (table 3.8). At one extreme, the governments of Croatia and Serbia and Montenegro spend between 6 and 7 per cent of GDP on health care, in line with most OECD countries. At

the other extreme, six countries in the region spend less than 2 per cent of GDP on health care, lower than in most developing countries. WHO (2006) estimates that public health-care expenditure in Tajikistan was PPP \$15 per capita in 2004, and in Azerbaijan PPP \$33 per capita: levels below those estimated for some sub-Saharan African countries.

**Table 3.8 Public expenditure on health as a percentage of GDP and per capita in PPP\$**

	Public expenditure on health as per cent of GDP			Per capita government expenditure on health in PPP\$
	1991	1998	2002–2004	2003
	Bulgaria	6.4	3.4	4.4
Romania	3.3	4.1	3.7	340
Albania	4.8	1.2	1.8	153
Bosnia and Herzegovina	3.5	4.9 <sup>a</sup>	4.8 <sup>a</sup>	166
Croatia	n.a.	4.6	6.5 <sup>a</sup>	701
FYR Macedonia	n.a.	5.0	5.4	329
Serbia and Montenegro	4.8	5.3	7.2 <sup>a</sup>	282
Belarus	3.1	4.9	4.7	406
Moldova	3.9	4.2	4.4	96
Russia	2.8	3.9	3.9	325
Ukraine	3.3	3.5	3.5	201
Armenia	3.2	1.6	1.4	61
Azerbaijan	4.3	0.9	0.8	33
Georgia	3.5	0.8	0.8	42
Kazakhstan	4.3	1.8	1.6	180
Kyrgyzstan	n.a.	2.6	2.1	66
Tajikistan	n.a.	1.1	1.0	15
Turkmenistan	n.a.	3.6	2.9	149
Uzbekistan	5.9	3.3	2.4	68

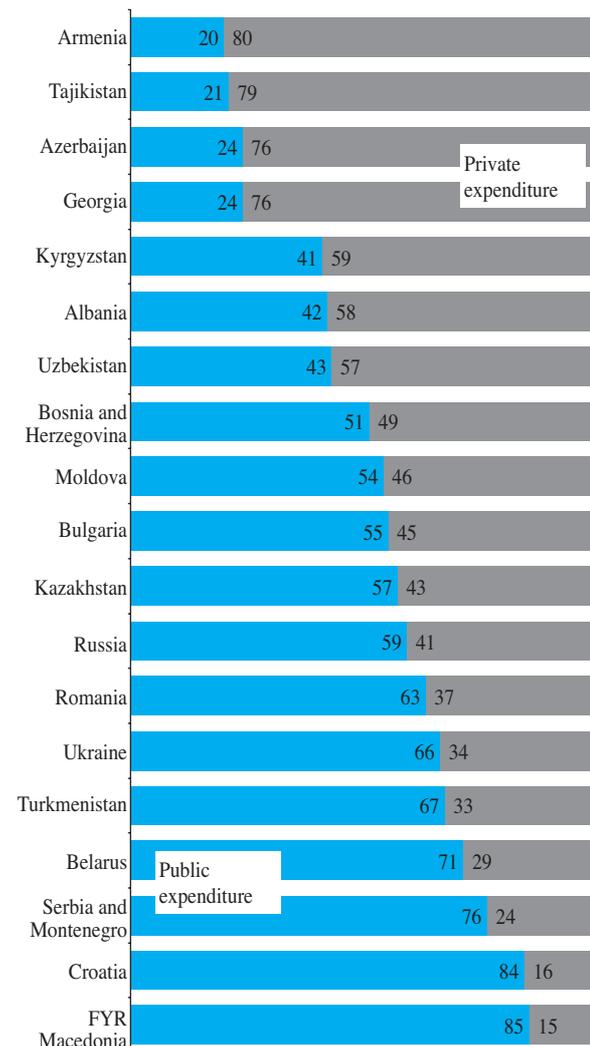
<sup>a</sup> These data on public expenditure on health as percentage of GDP were computed using statistics drawn from various editions of the World Health Report.

Sources: Data on public health expenditure as a percentage of GDP are from the TransMONEE Database; data on per capita government expenditure on health in PPP\$ are from WHO (2006).

The problem is not only low levels of expenditure, but also the way in which health budgets are allocated. Structural reforms of the health system have been slow to be implemented, and the funds are often spread thinly over the pre-existing systems of health service delivery. In many countries, there is an established tradition inherited from central planning which gives priority to budget requests for wages and social security contributions. When cuts are needed, they are applied to the item ‘other current expenditure’, which includes the purchase of goods and services, including medicines, food, utilities and maintenance of the infrastructure, that is, items which are vital to the quality of the health service. In Uzbekistan, for example, public expenditure on health in 2003 was 2.6 per cent of GDP, and 60 per cent of the health budget went on paying salaries.<sup>20</sup> However, despite the priority given to salary payments, the salary budget is also spread thinly over the pre-existing network and staff, and the resulting low level of salaries encourages the practice of demanding informal payments for supposedly free services. Thus the problem is not just to spend more, but to spend more effectively and fairly, if children are to be guaranteed access to affordable health services. In Russia, for example, public expenditure on health is not low compared to other middle income countries, but the fragmentation of the current public financing and delivery system contributes to growing inequalities in the resources available for health in different oblasts.<sup>21</sup> For those who can afford the higher costs, there is now much greater choice of medical services, but for those who cannot, the problems of access, affordability and quality have increased.

The transition period has seen several attempts to reform public health delivery and health financing to make the system more cost-effective, in particular through reform of primary health care services, less reliance on inpatient facilities, and the introduction of some elements of private health insurance. But the reform efforts in most countries have been piecemeal and incomplete, leaving a hybrid system where users are often confused as to which services are actually provided free, and with many service providers demanding informal payments. In Armenia in 1999, survey data showed that 91 per cent of patients had made informal payments,<sup>22</sup> and in Romania at the beginning of the 2000s informal payments represented about 40 per cent of out-of-pocket payments.<sup>23</sup> Figure 3.2 shows estimates of public and private shares in total health-care expenditure for 2003 in the countries of the region. In four countries of the Caucasus and Central Asian subregion, over 70 per cent of total health expenditure was made by households rather than the state; while at the other extreme in Croatia and the FYR Macedonia private expenditure represented 16 per cent of total health expenditure.

**Figure 3.2 Shares of public and private expenditure in total health expenditure, 2003 (per cent)**



Source: Authors' calculations from data in WHO (2006).

The increase in out-of-pocket expenditure for health care has led to a reduction in access to and affordability of health services, in particular for the more disadvantaged. Survey results show that in Kazakhstan, for example, 90 per cent of respondents cite lack of money for paid services and lack of free medical services as the reasons for lack of access to health care.<sup>24</sup> In Russia about one person in five who did not seek medical help when needed reported that the reason was the unaffordability of the services, while in rural Russia the main reason was the non-availability of a medical specialist in the area.<sup>25</sup> In Georgia, where private payments represent three quarters of total national expenditure on health, out-of-pocket payments as a share of household expenditure is five times larger for individuals in the poorest income quintile than for those in the richest one.<sup>26</sup>

The widespread system of informal payments not only penalizes the poor, by reducing access to health-care services, it also affects quality, since there is no guar-

antee of quality even for those who manage to pay. Users have no or few mechanisms to demand accountability from service providers. As in other areas of reform in the region, there has been a certain amount of ‘state capture’, with medical staff using their access to state facilities to supplement their low official salaries with paid services. Service providers may not be interested in completing reform, since reform would remove their ability to make informal earnings. A study on informal payments in the public health sector in Albania argues that ‘under-the-table’ payments pose an obstacle to progress on health reform, and points to problems in guaranteeing users the right to demand accountability.<sup>27</sup>

Thus government commitment to tackling child health deprivation has to be reflected both through increased health expenditure, and by ensuring more than just formal access to free health-care services. Chapter 1 argues that children are particularly reliant on the state for the provision of universal and affordable health services. Governments in the region therefore need to tackle informal payments, regulate formal payments and strengthen formal incentive structures for providers to ensure that basic services are in fact available to all children; and to push forward reforms to improve the quality of services provided at health facilities, and tackle the growing inequalities in quality and access.

**To summarize:** Health outcome indicators for children give no room for complacency in most countries of the region, and particularly in the Caucasus and Central Asian countries. There are large disparities within the region, and also within countries. Given that child mortality indicators are usually taken as a measure not just of health, but of overall quality of life, trends should be monitored carefully. Recent trends in child mortality rates are mixed and where there is improvement, it is slower than might be expected, and, in most cases, does not match the rate of improvement recorded in child income poverty.

The available data suggest that there are clear links between levels of income poverty and health outcomes for children. However, the analysis confirms the role of public health-care systems in reducing health deprivation and disparities among children. The particularly high reliance of children on functioning public health services means that a policy focus on improving access to affordable and quality service is required. The unfinished nature of health reform in most countries of the region, together with continuing low levels of public expenditure and investment, mean that children from poor households experience what the World Bank has termed “deprivation of affordable access to quality services”.<sup>28</sup> Public health budgets and health reform efforts therefore need to be monitored to be sure they are used to reduce health disparities and to improve levels and quality of health care.

## 3.2 Child deprivation in education

The region inherited a record of considerable achievement in the public provision of education services. Education systems in socialist countries were highly developed, with universal enrolment at the basic level, and formally free access up to tertiary level. These were notable achievements, especially in countries that were less developed or had rapidly growing populations, such as the Central Asian republics. Despite certain propaganda elements and a uniform approach to curricula, outcomes in education were often impressive. Similarly, there were very positive results in gender parity in literacy rates and school education. There was also a wide availability of clubs, extra-curricular activities, sports facilities, summer camps for children, and extended day schools, with supervised programmes when parents were at work.

At the same time, the education system suffered the consequences of the economic and political crisis which followed the onset of transition. In countries affected by ethnic strife, war and civil unrest, the education of thousands of children was severely disrupted. The analysis in this section shows that, in general, levels of access to compulsory education have been maintained since the late 1990s. Disparities among children in access to the other education levels (preschool, upper secondary and tertiary) have, however, been growing. There is also indirect evidence to suggest that in the compulsory school levels, which in most countries consist of 8–10 years of schooling across primary and lower secondary levels, differences in the quality of education provided remain large and are increasing. While there is no evidence of extreme educational deprivation, there is evidence of drops in the quality of school education, which have been exacerbated by the cuts in real public expenditure in this sector.

This section looks at data on enrolment trends for preschool, primary and secondary education, and where possible uses microdata to examine the extent of inequalities in access by looking at the link between enrolment and income level, and place of residence. Survey data are also used to look at the quality of education as measured by trends in learning achievements. The rapid demographic changes experienced by some countries in the region have meant that the school-age population has been shrinking rapidly, and this has led to some easing of pressure on the education system and budget. However, as with the health sector, the problem is not just the size of the budget, but in adjusting the budget decision-making process and the allocation mechanisms. And as with the delivery of health services, the quality of education services is compromised by low levels of public expenditure and inefficient use of available resources, as well as slow structural reforms and lack of concentrated efforts to

tackle questions of governance and corruption, which are contributing to growing inequalities in the quality of education available to most children.

### Preschool education

Preschool education plays an important role in the physical, cognitive and social development of children. In the short term, preschool also provides an ‘umbrella’ for a regular monitoring of the health and nutrition status of children at a critical period of growth. In the period before transition, preschool attendance by children aged 3–6 was common in many countries of the region; the system was well developed and there was general respect among parents for the role of preschool in child development. Although preschool facilities may have been developed by planners primarily to help draw the female working-age population into the labour force, there is evidence that they played a positive role from the point of view of early childhood development, and also countered inequalities by ensuring that the majority of children started basic schooling with similar levels of preparation and socialization. However, there were large intraregional disparities in the availability and use of preschool facilities: they were very common in the former Soviet republics which now form the western part of the CIS, in Bulgaria and Romania, but not in the more rural areas of Central Asia and Azerbaijan, nor in the former Yugoslavia.

In the 1990s both supply and demand constraints led to the closure of many preschool establishments, especially in the case of services which had previously been provided by industrial and agricultural enterprises. In other preschools, the quality of the facilities and care deteriorated. It has been estimated that in the former Soviet Union about 32,000 preschools were closed between 1991 and 1995.<sup>29</sup> Some countries attempted to transfer financial responsibility for preschools from enterprises to local municipalities, but with limited success, due mainly to the municipalities’ lack of a fiscal base. There was also a drop in demand for preschool services, partly as a result of the shrinking child population, as well as the fall in labour market participation rates for women, together with the increasing costs of sending children to preschool, and a deterioration in the quality of service provided. Whereas in the pre-transition period there had usually been waiting lists for preschool places, some countries in the 1990s had a large amount of unused capacity in the preschool system.

As a consequence, preschool enrolment rates declined in almost all the countries of the region. Kazakhstan, for example, witnessed an almost total disintegration of the preschool system, with enrolment collapsing from 53 per cent of the relevant age group in 1989 to 12 per cent in 1999. Enrolment rates began to recover in a few countries before the mid-1990s, while most countries

experienced a recovery at the end of the 1990s – in line with economic recovery – although increases in the Central Asian and Caucasus countries were and still are very limited. Private preschools remain a marginal phenomenon, accounting for less than 3 per cent of total enrolments in all countries of the region.

**Table 3.9 Preschool net enrolment rates for children aged 3–6, 1989 and 2004, and lowest enrolment rate level reached during the period 1989–2004 (per cent)**

	1989	2004	Lowest level reached during the period 1989–2004
Bulgaria	66.7	73.6	56.9 (1991)
Romania	63.3	72.2	52.6 (1991)
Albania	56.7	50.5	37.1 (1993)
Croatia	28.8	47.2	21.9 (1991)
FYR Macedonia	24.2	31.1	23.0 (1992)
Serbia and Montenegro	24.1	29.7 <sup>a</sup>	20.5 (1992)
Belarus	63.1	71.6 <sup>b</sup>	58.0 (1992)
Moldova	61.2	62.3	32.7 (1999)
Russia	73.4	68.9	64.3 (1998)
Ukraine	64.2	51.6	44.3 (1997)
Armenia	48.5	28.5	23.8 (1998)
Azerbaijan	25.1	21.0	12.9 (1998)
Georgia	44.5	26.8	25.6 (1995)
Kazakhstan	53.1	16.9	12.1 (1999)
Kyrgyzstan	31.3	10.5	8.0 (1999)
Tajikistan	16.0	6.8	5.4 (1999)
Turkmenistan	33.5	20.9	19.0 (1999)
Uzbekistan	36.8	19.2	16.1 (1998)

<sup>a</sup> Data refer to 2001.

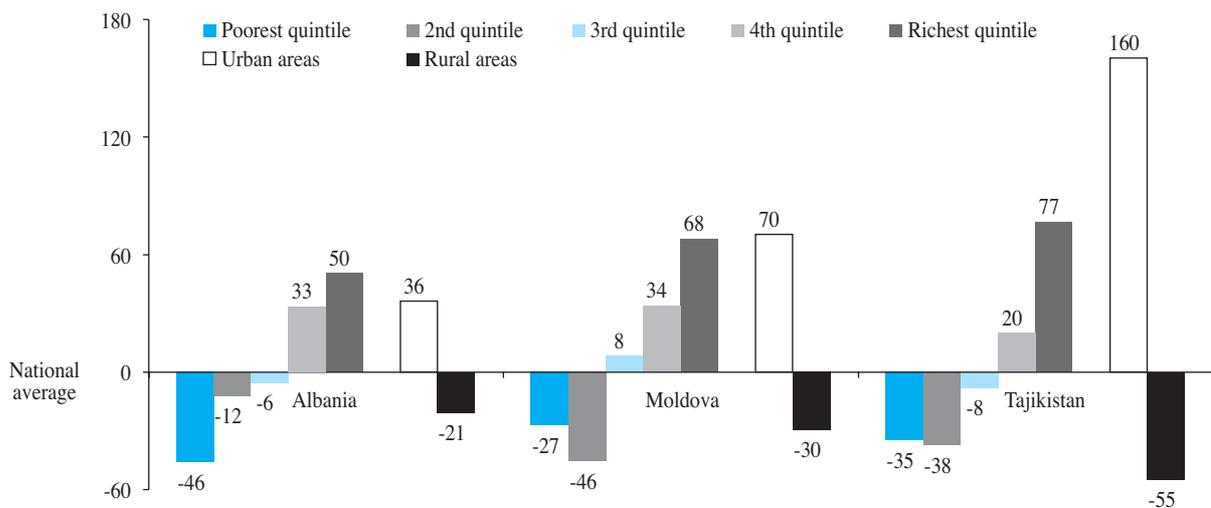
<sup>b</sup> Data refer to 2003.

Data for Albania, Belarus, Russia, Ukraine, Armenia, Kazakhstan (1989 and 1999), Kyrgyzstan and Tajikistan (1989 and 1999) are gross ratios; data for Belarus (2003) and Albania refer to children aged 3–5 years; the 1989 figure for Moldova includes Transdniestr. For the definition of net enrolment, see Technical Notes and Glossary on page 124.

Source: TransMONEE Database.

By 2004, preschool enrolments had reached high levels in Western CIS, Romania and Bulgaria, even surpassing pre-transition levels (see table 3.9). Moldova, despite its low level of GDP per capita and high levels of child poverty, performs quite well in terms of preschool participation, and has witnessed an impressive growth in enrolments during the phase of economic recovery. In Ukraine the recovery in enrolment rates has been slow, and the most recent data show it lagging behind its neighbours and still far below its 1989 levels. In general, in most of the region, there is a widening gap between rich and poor children in preschool enrolment, and thus in their preparation for compulsory education. Microdata show that in

**Figure 3.3 Preschool attendance of children aged 3–5 (relative per cent deviation from the national average), by expenditure quintile and urban or rural residence, 2002–2003**



Each column represents the relative deviation (per cent) from the national average preschool attendance rate, i.e. the national average index is 100, and if one subgroup of the population has an attendance ratio equal to the national average, the deviation is zero. If it has an attendance ratio 30 per cent higher than the national average, the percentage deviation is 30, etc. Expenditure quintiles are for the population of children only.

*Source:* Authors' calculations based on data from Albania Living Standards Measurement Survey 2002, Moldova Household Budget Survey 2003, Tajikistan Living Standards Measurement Survey 2003.

2002–2003, in Albania, Moldova and Tajikistan, it was predominantly children from households with higher income levels, and in urban areas, who attended preschool. Figure 3.3 illustrates the difference in preschool attendance for children aged 3–5 years by expenditure quintiles and urban or rural residence (relative to the national average). In Albania the preschool attendance rate for children in the poorest quintile is about 50 per cent lower than the national average, while for children in the richest quintile it is 50 per cent higher than the average. All three countries show a similar disparity in preschool attendance between children in the first and second income quintiles, and those in the fourth and fifth quintiles.

Children living in rural areas are less likely to attend preschool than children living in urban areas. This is particularly evident in Tajikistan, a predominantly rural country, which has the lowest preschool enrolment rates in the whole region. Parents of more than two thirds of children in the rural areas of Tajikistan claim that their children do not attend preschool because the facilities are situated too far from their place of residence. This is also the main reason given for non-attendance by parents of children living in rural areas in Albania and Moldova. Reasons for non-attendance in urban areas are more likely to be that the facilities are not affordable, or that the fees are too high, and some parents prefer to keep their children at home, particularly in the urban areas of Albania and Tajikistan.<sup>30</sup>

### Primary and secondary school

Most countries of the region are on track to achieve universal primary education, which is the global target for Millennium Development Goal 2, and many countries have formulated more ambitious targets, relating to secondary education. Free compulsory school education (from the ages of roughly 6/7 to 13/17 years old,<sup>31</sup> covering primary and lower secondary levels – see table 3.10) is the norm in the region, and by the end of the 1990s most of the countries of the region had achieved a significant recovery in enrolment rates, with completion rates reaching pre-transition levels.

Gross enrolment rates for lower secondary education range from 79 per cent in Moldova to over 100 per cent in Albania, Belarus and Kazakhstan. For most of the countries there are signs of improvement compared with 1998/99 enrolment levels, and they are now comparable with the ratios for primary education. The situation regarding upper secondary education, for the school year 2003/04, is more mixed across the region, with gross enrolment lower than 80 per cent for most countries.

Analysis of microdata for selected countries shows that for primary and lower secondary levels, there are no significant differences in enrolment rates between children from poor and rich households. However, as with the preschool level, there are more significant differences in school attendance rates by expenditure quintile and place of residence at the upper secondary level.

**Table 3.10 Trends in enrolment ratios in primary, and lower secondary education, 1990–2004 (per cent)**

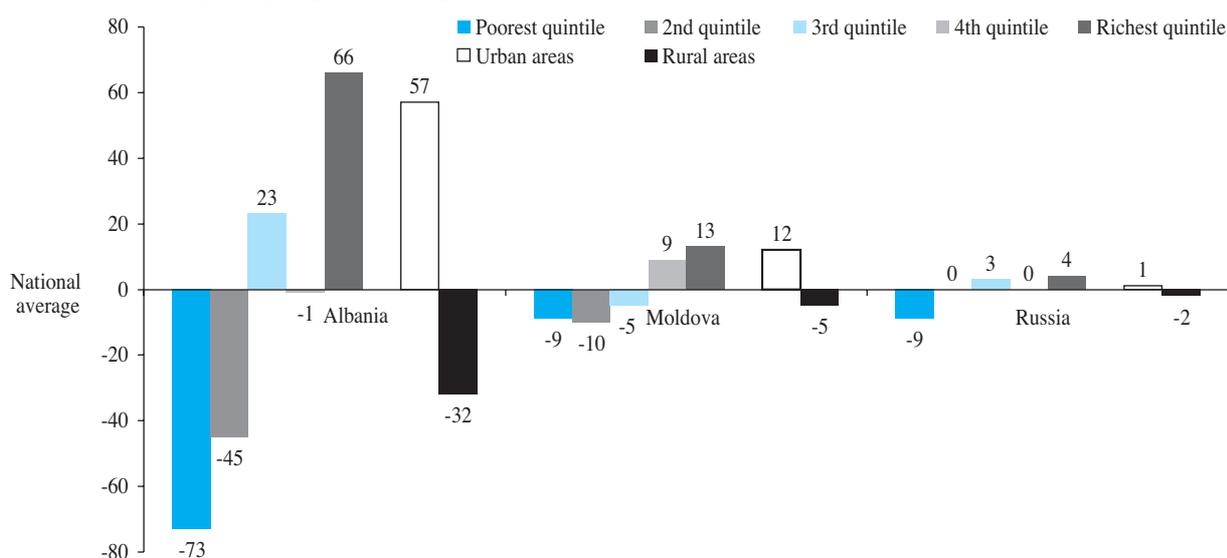
	Primary net enrolment			Primary gross enrolment			Lower secondary gross enrolment	
	1990/91	1998/99	2003/04	1990/91	1998/99	2003/04	1998/99	2003/04
Bulgaria	86	97	95	98	103	105	85	88
Romania	81	96	92	91	104	107	90	96
Albania	95	99	96 <sup>a</sup>	100	110	104 <sup>a</sup>	101	102 <sup>a</sup>
Croatia	74	85	87 <sup>a</sup>	80	96	94 <sup>a</sup>	91	94 <sup>a</sup>
FYR Macedonia	94	93	92	99	102	98	99	94
Serbia and Montenegro	69	n.a.	n.a.	72	104	n.a.	103	n.a.
Belarus	86	n.a.	90	96	109	101	93	107
Moldova	89	78	78	93	84	85	n.a.	79
Russia	99	n.a.	91	109	100	123	92	89
Ukraine	80	n.a.	82	89	106	95	97	93
Armenia	n.a.	n.a.	94	n.a.	n.a.	101	n.a.	97
Azerbaijan	89	85	84	110	93	97	79	87
Georgia	97	n.a.	93	97	95	95	85	92
Kazakhstan	88	n.a.	93	88	93	109	88	100
Kyrgyzstan	92	88	90	n.a.	101	98	83	90
Tajikistan	77	89	97	91	103	100	81	93
Turkmenistan	77	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Uzbekistan	78	n.a.	n.a.	81	n.a.	100	n.a.	98

<sup>a</sup> Data refer to 2002/03.

The classification by education levels follows the International Standard Classification of Education, ISCED97. Primary and Lower Secondary levels correspond to ISCED 1 and ISCED 2 and in general for the SEE/CIS these are compulsory levels. The number of years of compulsory schooling varies throughout the region, but in general primary school covers grades 1 to 3 or 4 (age 6/7 to 10/11 years); lower secondary covers grades from 5 to 8 or 9 (age 10/11 to 14/16 years). For information on the specific organization of the school system in each country of the SEE/CIS region, see the website of the UNESCO Institute for Statistics at [www.uis.unesco.org](http://www.uis.unesco.org). For the definition of gross and net enrolment see Technical Notes and Glossary on page 124.

Source: UNESCO Institute for Statistics databases.

**Figure 3.4 School attendance of children aged 15–17, upper secondary (relative per cent deviation from the national average), by expenditure quintile and urban or rural residence, 2002–2003**



Each column represents the relative deviation (in percentage) from the national average school attendance rate for children aged 15–17 (i.e. the national average index is 100, and if one subgroup of the population has an attendance ratio equal to the national average, the deviation is zero. If it has an attendance ratio 30 per cent higher than the national average, the percentage deviation is 30, etc.). Expenditure quintiles are for the population of children only.

Source: Authors' calculations based on data from Albania Living Standards Measurement Survey 2002, Moldova Household Budget Survey 2003, Russia NOBUS Survey 2003.

Figure 3.4 shows that Albanian children aged 15–17 years in the two poorest quintiles have attendance rates significantly below the national average. In Moldova and Russia the socio-economic differences in school attendance for children aged 15–17 years are less pronounced. In Russia, children belonging to the poorest 20 per cent of the population have lower than average attendance rates, but the national average is high. For Moldova, however, upper secondary enrolment rates are still low, and other studies have suggested that an increasing number of older children from better-off families have not been enrolling in school in order to engage in paid work after the 1998 economic crisis.<sup>32</sup>

Primary school enrolment rates are high and vary little within the countries of the region, but the picture changes at the secondary level. For example, in 2003, in Romania, secondary enrolment rates ranged from about 80 per cent in the North-East region to 95 per cent in the Bucharest region. In the FYR Macedonia, secondary enrolment rates ranged from 55 per cent in the South-East region to 88 per cent in the Eastern region.<sup>33</sup> The data for Albania and Russia presented in table 3.11 also show that children from large families are less likely to attend upper secondary levels, suggesting again disadvantages for this group of children. The World Bank (2005f) reports a substantial disadvantage even at levels of schooling where enrolment is compulsory of Roma children in Romania and in Bulgaria compared with the rest of the child population.

**Table 3.11 School attendance for children aged 15–17, by number of children living in the household (per cent)**

Number of children in the household	Albania 2002	Russia 2003
1 child	59.4	92.9
2 children	54.2	91.9
3 children or more	34.3	85.6
Total	47.6	92.0

Source: Albania Living Standards Measurement Survey 2002; Russia NOBUS Survey 2003.

Across all countries, rural children are worse off in terms of access to the preschool and upper secondary levels. The difference in school attendance between children aged 15–17 living in urban and rural areas is quite marked in Albania, while in Russia it is very slight. In Moldova, 8 per cent of children aged 15–17 in urban areas do not go to school, compared to 26 per cent in rural areas. The lower attendance figures in rural areas may partly reflect lower expectations as to the benefits of education in terms of future career options, as well as pressures on children to help with agricultural production. But another factor is the physical conditions in the schools themselves. Repair and maintenance

have often been neglected due to lack of budget funds, and the breakdown in central heating supply in some countries means that schools may not be heated in winter. Low salaries also mean that it is difficult to attract teachers to rural or remote areas. A report on education in Kyrgyzstan found that relatively few rural children continued on to secondary education after finishing primary school, particularly if that meant travelling to another school. In Central Asian rural areas, parents are often reluctant to allow girls to travel on public transport to the nearest upper secondary school.<sup>34</sup>

### Quality of education

Information on enrolment and attendance provides only a partial picture of education in SEE/CIS. It shows access and use of school facilities, but nothing about the quality of education received by children at school. Studies throughout the region suggest that standards have deteriorated since the pre-transition period, and that inequalities in the quality of education offered in schools have grown. Lack of investment in teacher training and curriculum development, lack of funds for school materials and maintenance of the education infrastructure, and low incentives for teaching staff are some of the factors which have contributed to the fall in quality.

Measuring the impact of all these factors on educational outcomes is not easy, but survey data on students' knowledge in particular subject areas are available for a few countries. These are international standard surveys of children attending school, and involve school students performing identical knowledge and comprehension tests. Table 3.12 presents some results for tests in mathematics from surveys of 13-year-old children attending school, carried out in 1999 and 2003. The columns on the left of the table show that, on average, countries in the region perform well. Average scores for Russia compare favourably with those for Central European countries in both 1999 and 2003, but they lag somewhat behind the best performing countries globally. Average scores for five other countries in the region, including the poorer countries of Armenia and Moldova, are not far behind those for Central Europe. Average scores in the FYR Macedonia are somewhat lower and closer to those in the best performing developing countries, Jordan and the Islamic Republic of Iran.

Table 3.12 suggests that, on average, students' performance has been maintained, although not improved, since the late 1990s. However, the region registered greater disparities in results than is the case in the countries of Central Europe. The data in last two columns of the table indicate disparities in results between students in the 75th percentile (that is, students whose mathematics test score is lower than that of a quarter of students in the country, but higher than the other three quarters) and the 25th percentile (students whose score

**Table 3.12 Averages and dispersion in mathematics test (TIMSS) scores among children aged 13 years, 1999 and 2003**

	Median score 1999	Median score 2003	Ratio of 75th to 25th percentile scores 1999	Ratio of 75th to 25th percentile scores 2003
Singapore	604	605	1.19	1.19
Republic of Korea	587	589	1.19	1.20
Netherlands	540	536	1.19	1.20
Italy	479	484	1.28	1.24
Hungary	532	529	1.24	1.23
Slovak Republic	534	508	1.21	1.25
Latvia	505	505	1.23	1.22
Lithuania	482	502	1.24	1.24
Slovenia	530	493	1.23	1.22
Russia	526	508	1.24	1.23
Armenia	n.a.	478	n.a.	1.27
Serbia	n.a.	477	n.a.	1.29
Bulgaria	511	476	1.25	1.27
Romania	472	475	1.30	1.31
Moldova	469	460	1.28	1.28
FYR Macedonia	447	435	1.32	1.32
Jordan	428	424	1.39	1.35
Islamic Republic of Iran	422	411	1.30	1.28

Data for Latvia refer to Latvian speaking schools only.

Source: Trends in Mathematics and Science Studies, 1999 and 2003, at <http://www.timss.org/>

is lower than that obtained by three quarters of students, but higher than that obtained by a quarter). The ratio of 1.23 for Russia in 2003 indicates that the 75th percentile score was 23 per cent higher than the 25th percentile score. This is in the mid-range of ratios for Central European countries (1.22–1.25). For every other SEE and CIS country, the ratios are higher, signalling greater disparities between the best and the worst performing children. As with average scores, these ratios have not changed greatly since the late 1990s, and point to continuing differentials in the quality of schooling.

The results for the region in the 2001 Progress in International Reading Literacy Study (PIRLS), another international survey of learning achievement concerned primarily with literacy rates, show a mixed picture, with Bulgaria among the world's best performing countries, Russia and Romania with results over the international average, and Moldova and the FYR Macedonia with performances under the international benchmarks.<sup>35</sup>

### Public expenditure on education

As with the health sector discussed above, improvements in access to and quality of school education

require both increases in expenditure and rationalization of its patterns. Public expenditure on education as a share of GDP has risen in the period of economic recovery in 8 out of the 13 countries for which data are available. These increases, however, are generally small (as in Azerbaijan, Georgia and Romania), while other countries show decreases (see table 3.13). In 2001, per capita public expenditure on education in Tajikistan was among the lowest in the world at PPP \$22, while levels in Kyrgyzstan, Moldova and Georgia, at about PPP \$50 per capita, were lower than in many countries with similar or lower levels of national income. In real terms – taking into account the increases in GDP across the region in the period 1998–2004 – total expenditure on education increased in almost all of the countries, but in many of them levels are still far below those of 1991. In 2004 the real value of total public expenditure on education in Bulgaria was 93 per cent of the 1991 level, but in Armenia and Azerbaijan it was about 40 per cent, and in Kyrgyzstan and the FYR Macedonia it was circa 30 per cent.

Examination of budget allocations for different levels of education shows that in most countries a sizeable share of funding is directed to the primary and lower

**Table 3.13 Public expenditure on education as percentage of GDP, 1991–2004**

	Public expenditure on education (per cent of GDP)				Change in real levels of public expenditure on education
	1991	1995	1998	2004	2004 level as per cent of 1991 level
Bulgaria	5.1	4.0	3.9	4.3	93.0
Romania	3.6	3.4	3.3	3.6 <sup>a</sup>	121.2
Albania	5.0	3.8	3.3	3.1	130.1
FYR Macedonia	6.8	5.2	3.8	2.4	33.8
Serbia and Montenegro	n.a.	n.a.	5.2	n.a.	n.a.
Belarus	4.6	5.5	6.2	5.3	133.6
Moldova	n.a.	7.6	6.2	5.4	n.a.
Russia	3.6	3.7	3.7	n.a.	n.a.
Ukraine	n.a.	5.4	4.4	5.3	n.a.
Armenia	7.5	2.5	1.8	2.5	39.8
Azerbaijan	6.9	3.5	3.4	3.5	41.9
Georgia	6.4	0.9	2.0	2.9	29.1
Kazakhstan	n.a.	3.2	3.9	n.a.	n.a.
Kyrgyzstan	6.0	5.8	4.3	3.9	53.3
Tajikistan	n.a.	2.4	2.2	2.8	n.a.
Turkmenistan	n.a.	3.2	6.1	6.9 <sup>a</sup>	n.a.

<sup>a</sup> Data for 2003.

The last column reports the real value of public expenditure on education in 2004, expressed as a percentage of the real value in 1991.

Source: TransMONEE Database.

secondary levels, but there are some exceptions. For example, Armenia and Ukraine allocate about a third of their low education budgets to the tertiary level. And while Uzbekistan spends a relatively high share of GDP on education, 9 per cent, it spends only a small share of this on primary and secondary education, and spending is biased towards the tertiary level.<sup>36</sup>

As with health sector budgeting, the problem for the education sector is not just the level of expenditure, but the budget allocation mechanisms. Allocations are usually based on outdated norms for minimum class and teaching loads. In many CIS countries there have been attempts to decentralize responsibilities for financing and managing primary and secondary schools, but local authorities do not have a sound enough fiscal base to allow them to be financially independent, and in practice rely on central subsidies and transfers. And although local authorities have been given some formal rights to make independent decisions, the reality is more mixed; often decisions, for example on new schools, are made at the centre, and the local level is asked to provide the funding.

There is some evidence that decentralization has led to an increase in inequalities within countries in the funds available for education. This can be seen in the example of Russia, where in 2001 over 60 per cent of the educational budget was reportedly funded from municipal budgets, 19 per cent from regional budgets, and 18 per cent from the central budget.<sup>37</sup> Table 3.14 provides data by federal district on child income poverty rates, per student public expenditure levels, and state examination results, and, even if it does not report a clear pattern, it shows that the federal districts with the highest child poverty rates (Southern and Far East) have lower per capita expenditure levels, and lower levels of student achievement.

**Table 3.14 Expenditure on education per student and average uniform state examination score by federal districts in the Russian Federation**

Federal district	Child poverty rate (PPP \$2.15), per cent	Expenditure on education per student (adjusted), thousand roubles	Uniform state examination (mean score)
Northwest	7.7	4.7	52.0
Central	12.4	4.9	51.1
Urals	16.5	4.7	49.1
Siberian	17.9	4.0	45.1
Volga	18.2	4.6	51.4
Southern	19.4	3.7	46.0
Far East	22.3	2.9	46.6

Child poverty rates refer to children aged 0–17 living in households with per capita consumption lower than PPP \$2.15 a day. For the comparison of expenditure on education between federal districts, data have been adjusted to control for regionally specific factors and costs.

Source: Data on expenditure on education per student and on uniform state examination mean scores are from UNDP (2005b); poverty statistics derived using data from Russia NOBUS Survey 2003.

When local budgets cannot cover basic recurrent costs, subsidies are provided by the central budget. However, in line with budget tradition, most of these are allocated for salaries, while repair and maintenance, and investment in school materials and equipment are neglected. In Uzbekistan, for example, 77 per cent of recurrent expenditure is used on salaries.<sup>38</sup> In most countries, there has been no recent investment in new facilities or programmes. In 2002, current expenditure accounted for more than 95 per cent of total expenditure in Azerbaijan, Bulgaria and Tajikistan, and about 90 per cent in Croatia.<sup>39</sup> The pattern of public expenditure over the transition period has involved a failure to invest in the quality of infrastructure and of teaching staff, which is now affecting the quality of school education.

### Private expenditure on education

Low levels of public expenditure, and a lack of reforms aimed at rationalizing the network through which education services are delivered have led to a rise in private expenditure on education. This takes several forms. First, in some countries there is now a choice of private educational facilities and of private tutoring. While this helps the individual development of some children, it works against the poor and reinforces inequalities. Secondly, public sector schools have relied on donations by parents or local sponsors to help with repairs, equipment and materials, meaning that standards of facilities depend on the state of health of the local economy, again leading to inequalities according to place of residence. Thirdly, some teachers on low salaries try to augment their monthly income by charging for extra tuition, for example to prepare children for exams.

In 1998/99, households in Armenia spent about twice the amount spent by the government on education.<sup>40</sup> In Albania in 2002, private spending represented on average about 2.5 per cent of the expenditure of households with students. The level of private expenditure increased the higher the education level. More than 40 per cent of students enrolled in basic and secondary education had informal payments made on their behalf, in kind or in cash, to schools and teachers, and informal payments were more common for students belonging to households in the richest quintiles. At the same time, a large proportion of students received private tutoring.<sup>41</sup> In Moldova, household expenditure on education has become more important as public spending on education has fallen.<sup>42</sup>

In Russia, where there is also evidence of growing disparities in access to quality education according to the income level of households, the situation is compounded by an expansion of privately financed education. There is significant variation in private expenditure on education across households in different positions on the distribution scales, including, for

example, expenditure on extra tutoring, transportation, etc. While scholarships exist, their provision does not seem to be adequately targeted on the poor.<sup>43</sup>

**To summarize:** Preschool education is generally recognized to be advantageous for child development. The fall in provision and enrolment rates for preschool in the region is a cause for concern, particularly because there is evidence that the decline has disproportionately affected children from poorer and rural households, compounding the disadvantages these children face when they enter school.

Enrolment rates for compulsory school education have largely recovered, and in most countries demographic trends mean that there is actually less pressure on the education network and budgets. There have also been increases in enrolment rates for non-compulsory upper secondary levels, but the available microdata point to differences according to income levels, place of residence, size of household and ethnicity.

There are concerns about falls in quality at all levels, and especially about growing inequalities in the quality of education provided through the school system, as a result of slow updating of the curriculum, lack of incentives for teaching staff, lack of investment in teacher training and retraining, the need for parents to pay for school materials and extra tutoring, and the bad state of repair of many buildings. As with health expenditure, improvements in the quality of education require not just an increase in levels of public expenditure, but also structural and institutional reforms, and improvements in governance. With little or no adjustment in the school network, and in staff levels, public expenditure is being spread thinly, putting the quality of the services provided at risk. Private expenditure has to a certain extent made up for shortages in state funding, but this is also contributing to inequalities in access and in the quality of education offered.

### 3.3 Housing deprivation

The right to adequate housing is a core dimension of the right to an adequate standard of living explicitly spelled out both in the Universal Declaration of Human Rights (Article 25) and in the Convention on the Rights of the Child (Article 27). There is empirical evidence from high income countries that poor housing conditions can have an adverse impact on children's health, education and life chances.<sup>44</sup> In this section, housing deprivation is analysed using three different indicators which are highly relevant for child well-being, namely overcrowding, access to water and use of 'clean' fuels for heating.

#### Housing and infrastructure: the inheritance from central planning

The current housing conditions in the region are a very visible part of the central planning inheritance. In

the post-war period, especially from the 1960s onwards, there were strong housing construction efforts. In the centrally planned economies, all citizens were entitled to housing<sup>45</sup> and entitled to a minimum number of square metres. However, overambitious construction targets, and informal or unplanned migration to the larger cities exacerbated shortages and overcrowding. In the Soviet Union in 1989, the average per capita housing space was 15.8 square metres, with a median of 12 square metres, less than half the average of Western Europe.<sup>46</sup> In Leningrad (since 1991, St Petersburg) 36 per cent of the population was still living in communal flats, where several families shared the kitchen, bathroom, toilet and corridors.

The main advantage of the mass-produced prefabricated apartment blocks built in the 1960s and 1970s was that they were connected to the utility infrastructure – a centralized water supply, sewerage, and district heating. State housing construction was linked to the urbanization process, and access to a central infrastructure was strongly biased in favour of urban areas. In rural areas, on the other hand, single-family housing remained prevalent, and connection to the infrastructure was less common.

During the transition period the picture became more mixed, and the offer of housing more varied. However, housing shortages and overcrowding remain a serious problem. The construction of new housing in most of the region declined markedly after 1990. For example, in Russia the total number of new dwellings completed each year fell steadily from about 1 million in 1990 to 373,000 ten years later.<sup>47</sup> In SEE the decrease in the construction of new dwellings was more pronounced in Bulgaria and in Croatia, where the withdrawal of state support for housing was even more drastic.<sup>48</sup>

The rapid decline in construction was particularly evident in the countries affected by war. In Tajikistan, for example, due to the parallel effects of civil war and economic crisis, practically all housing construction came to a halt during the 1990s, and there are half-finished buildings scattered throughout the country, while the existing housing stock continues to deteriorate for lack of repair and maintenance. In Azerbaijan, more than 600,000 internally displaced persons were still living in temporary and unsanitary accommodation in 2003, although efforts have been made since then to provide them with better conditions.<sup>49</sup>

Overcrowding is still widespread and many extended families live in apartments not large enough to accommodate a single family. But the problem is not only lack of new construction. Throughout the region the existing housing stock is aging.<sup>50</sup> Lack of repair and maintenance work on the utility infrastructure has meant that poor housing is often accompanied by poor or irregular supplies of water and heating. While the electricity supply has largely been maintained, the economic crisis

and public budget difficulties led to the collapse of the public district heating systems in most CIS countries, and neglected or absent infrastructure has meant a fall in the quality and supply of water and gas.

In capital and other major cities the picture is more diverse, with housing providing a very visible reflection of the social processes occurring in the countries, and especially the growing inequalities in opportunities which have characterized the transition period. Some of this is positive, in that households now have a greater choice of housing. Capital cities have seen new housing blocks, usually of better quality, and also new residential areas with individual housing. But these cities have also seen the formation and expansion of illegal and slum-like settlements, often on the outskirts. In most cases, these dwellings have no connection to the public utilities network and have poor sanitation.

### Overcrowding

Overcrowding can affect a child's opportunity to do homework, rest and play. National legislation in the different countries defines the minimum living space which should be available for each household member. These minimums vary considerably throughout the region. For example, in Moldova the minimum norm is 9 square metres per person, while in Belarus it is 16 square metres per person, but this includes service spaces and corridor. For the purposes of this study an extreme measure for overcrowding was chosen: households are considered to be living in overcrowded conditions if they have less than 6 square metres of living space per capita – excluding services, that is, toilet, bathroom, kitchen and balcony – or, when there are no precise data on size of housing, where there are more than three persons per room (see table 3.15).

With the exception of Tajikistan, less than 20 per cent of the population in each country is affected by extreme overcrowding. In most countries overcrowding is more common in the capital cities, apart from Albania, Romania and Bulgaria, where rural areas have a higher percentage of individuals living in overcrowded housing conditions. However, there is also evidence that the combination of economic recovery and demographic decline in most countries has meant that the overall share of people living in overcrowded conditions has been decreasing.<sup>51</sup>

As with health and education deprivation, microdata from surveys are used to look at the extent to which overcrowding experienced by children in the region is associated with household income levels, place of residence (urban/rural),

**Table 3.15 Overcrowding by type of residence and richest and poorest quintiles (all individuals), 2002–2004 (per cent of all individuals living in dwellings with less than 6 square metres of living space per capita, or with more than three persons per room)**

	Capital city	Other urban	Rural	Poorest quintile	Richest quintile	Total
Bulgaria	5	6	8	15	2	6
Romania	8	8	14	30	1	10
Albania	10	16	19	35	4	17
Bosnia and Herzegovina	4	4	2	3	2	3
FYR Macedonia	9	8	7	19	2	8
Serbia and Montenegro	4	3	2	6	2	3
Belarus	11	8	7	17	3	9
Moldova	18	7	4	13	5	7
Russia	18	10	10	18	7	11
Ukraine	5	4	4	9	1	4
Armenia	19	15	8	18	10	13
Azerbaijan	5	3	6	8	2	5
Georgia	15	13	5	13	6	10
Kazakhstan	13	8	11	19	3	9
Kyrgyzstan	28	20	13	30	7	17
Tajikistan	36	33	32	50	17	32
Uzbekistan	13	9	7	11	7	8

Source: World Bank (2005a), Appendix B, table 10.

and household size. Table 3.15 also shows that in every country for which data are available, the incidence of overcrowding is highest among low income households, and in Romania, Albania and the FYR Macedonia the differences between low and high income household are particularly stark. However, while some of the poorest countries have the highest average levels of overcrowding, there is no strong relationship between national GDP level and overcrowding

**Table 3.16 Children living in overcrowded housing (per cent)**

	All individuals	All children	Percentage of children living in overcrowded dwellings						
			Urban	Urban – poorest quintile	Rural	Rural – poorest quintile	1 child	2 children	3 or more children
Albania	17	22	19	42	24	39	6	17	30
Tajikistan	19	21	18	35	22	36	2	7	24
Bulgaria	3	7	5	31	11	25	1	4	26
Moldova	7	11	20	21	7	18	6	11	20
Russia	7	13	13	26	13	23	8	14	34

For Albania and Tajikistan, overcrowding is defined as more than three persons per room, excluding service spaces (kitchen, bathroom, toilet, etc.); for Bulgaria, Moldova and Russia, overcrowding is defined as less than 6 square metres of living space per person.

Source: Authors' calculations based on data from the Albanian Living Standards Measurement Survey 2002, Bulgarian Integrated Household Survey 2001, Moldova Household Budget Survey 2003, Russia NOBUS Survey 2003, Tajikistan Living Standards Survey 2003.

levels across the region: other factors such as demographic trends, the pace of urbanization and the extent of informal migration to capital cities also play an important role.

Not surprisingly, large households, in most cases families with children, are more likely to live in overcrowded conditions. Table 3.16 shows that for all five countries for which data are available, children have a higher risk of living in overcrowded housing than the general population. This difference is less significant for countries with a higher share of children in the total population.

Children in non-nuclear and/or multigeneration families are more likely to experience overcrowding in Tajikistan and to a lesser extent in Bulgaria, while in Moldova there is no significant difference in overcrowding experienced by children in nuclear households and children in non-nuclear households.

With the exception of Moldova, urban children are reported to suffer less from limited dwelling space, but this result is not confirmed for all levels of income: the poorest children both in urban and in rural areas have a similar risk of living in overcrowded conditions. In Bulgaria, the problem of overcrowding is heavily concentrated among the poorest children, specifically Roma children whose overcrowding rate is about 30 per cent compared to less than 1 per cent for the rest of the child population.

### Access to water and sanitation

Lack of access to safe drinking water and lack of adequate sanitation are strongly associated with poor health outcomes for children. Access to safe drinking water is here measured in the region as access to piped water, or connection to the state water supply infrastructure. Using this indicator, the problem of access to safe water does not appear to be a serious one, especially in urban areas. As explained above, the urban areas were privileged in having connections to the public infrastructure in the central planning period, and households in rural areas are still much less likely to be connected to a central water supply and sanitation (see table 3.17).

However, connection rates give only a partial picture of access to water, because they give no measure of the quality of the water delivered, or of the regularity of supply. Across the region, there have been consistent reports of growing irregularity and disruptions in the central water supply. For example, in Tajikistan from the late 1990s to the early 2000s, the average hours per day of water supply decreased substantially, from about 15 to about 5 hours a day.<sup>52</sup> Access to improved sanitation is problematic in rural areas, and coverage in urban areas is also low in the poorest countries of the region. For rural areas in Romania, data show a partic-

**Table 3.17 Household access to piped water and improved sanitation, 2002 (per cent of households)**

	Improved drinking water coverage	Household connection			Improved sanitation coverage		
		Urban	Rural	Total	Urban	Rural	Total
Bulgaria	100	100	n.a.	n.a.	100	100	100
Romania	57	79	13	49	86	10	51
Albania	97	96	46	68	99	81	46
Bosnia and Herzegovina	98	98	69	82	99	88	93
Serbia and Montenegro	93	98	64	82	97	77	87
Belarus	100	78	22	61	n.a.	n.a.	n.a.
Moldova	92	78	9	41	86	52	68
Russia	96	92	52	81	93	70	87
Ukraine	98	93	49	78	100	97	99
Armenia	92	97	64	85	96	61	84
Azerbaijan	77	76	19	47	73	36	55
Georgia	76	83	30	58	96	69	83
Kazakhstan	86	88	27	61	87	52	72
Kyrgyzstan	76	87	28	48	75	51	60
Tajikistan	58	82	26	40	71	47	53
Turkmenistan	71	81	29	52	77	50	62
Uzbekistan	89	85	33	53	73	48	57

Improved drinking water sources are household connection, public standpipe, borehole, protected dug well, protected spring and rainwater collection. The household connection takes into account only piped water that is distributed in the house or just outside (yard) and that can be considered as used privately. Improved sanitation facilities include connection to a public sewer, connection to a septic system, pour-flush latrine, simple pit latrine and ventilated improved pit latrine.

Source: WHO and UNICEF Joint Monitoring Programme for Water Supply and Sanitation.

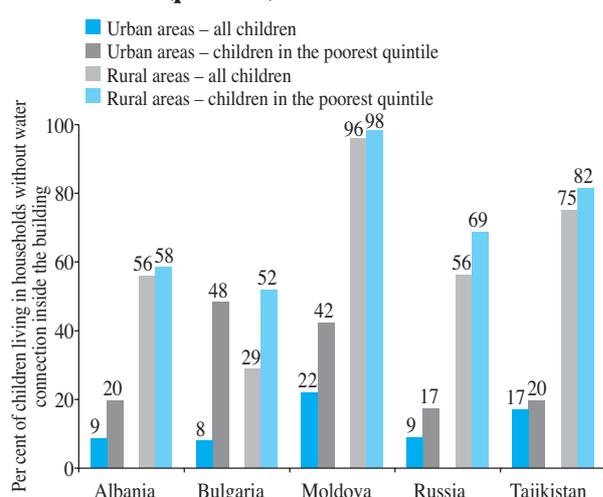
ularly low coverage rate both for piped water and improved sanitation. Seven million people in Romania get their drinking water from wells, and the wells are often polluted with nitrates, bacteria and pesticides, and even for public drinking water wells there is no effective water quality control.<sup>53</sup>

No major outbreaks of waterborne diseases have been registered in the region, which suggests that the quality of the water is still not a significant problem;<sup>54</sup> however, stricter monitoring is required to track the effects of an ageing infrastructure and lax quality controls on child health. Moreover, apart from the health implications, lack of access to centrally supplied water usually implies that household members, including children, have to spend time fetching water. This means that adults may have less time to care for and provide assistance to their children, or that children may have less time for study and play.

Survey microdata are used here to look at access to piped water for children in five countries of the region. Figure 3.5 confirms that lack of a public water connection is more likely to affect children in rural

areas, although there are also sections of the urban child population living in housing without a connection to the central water supply. In Moldova and Tajikistan about 20 per cent of urban children live in housing without a water connection, but in the capital cities virtually all children in Moldova and about 95 per cent of children in Tajikistan live in housing connected to the distribution system. In Bulgaria, urban children in the poorest income quintile are just as likely as rural children in the poorest income quintile to live in housing without a piped central water supply; the problem of non-connection concerns less than 15 per cent of the total child population, and is heavily concentrated in the poorest quintile of this group. In urban Moldova this type of deprivation affects children in the bottom two quintiles, while in rural areas there is less bias towards the poorest households, because of the overall lack of public water infrastructure. Children in rural areas in Albania and Tajikistan and, to a lesser degree, in Russia are less likely to live in housing connected to the public network

**Figure 3.5 Children living in dwellings not connected to the public water network, around 2003 (per cent)**



The poorest quintile refers to the poorest 20 per cent of children ranked according to per capita household expenditure levels.

Source: Albanian Living Standards Measurement Survey 2002; Bulgarian Integrated Household Survey 2001; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003; Tajikistan Living Standards Survey 2003.

### Access to 'clean' fuels

Lack of access to 'clean' fuels for cooking and heating – as with safe water – has implications for child health, and also for the time burden of parents and older children. The use of 'dirty' fuels (such as firewood, charcoal, crop waste, coal) as opposed to 'clean' fuels (such as liquefied petroleum gas, natural gas or electricity) is one of the main sources of indoor air pollution and is associated with respiratory diseases among infants and

children.<sup>55</sup> Use of these fuels can also present a fire hazard, and collection of firewood is time-consuming for household members. The availability and affordability of reliable sources of heating is particularly important for child well-being in SEE/CIS countries, where winters can be long and severe.

In the central planning period, access to and use of 'clean' fuels were common in urban areas, while rural dwellers relied mainly on traditional fuels for heating and cooking. Apartment blocks were connected to district heating systems (which also provided hot water) and the cost of heating to households was low. In the transition period, many district heating systems either collapsed, or tended to break down. Many households in the region reacted by making more use of 'dirty' fuels. More recently, the collapse of district heating has been made up for, to a certain extent, by the extension of the gas supply network, but this has also meant that access to 'clean' heating sources has become less equitable.<sup>56</sup>

The use of 'dirty' fuels is still widespread not only in rural areas, but also in secondary cities. World Bank (2005a) reports that 5 per cent or less of the inhabitants of capital cities rely on 'dirty' fuels, while in other urban areas the proportions are 51 per cent in Bulgaria, 30 per cent in Moldova and 7 per cent in Kazakhstan. Almost all children in the rural areas of Armenia, Bulgaria, Moldova, Romania and Tajikistan live in households using 'dirty' fuels as the main source of heating.

The data reported in table 3.18 also indicate that urban children from the low income quintiles are more likely to be exposed to 'dirty' fuels than urban children at higher income levels. In urban Russia and in urban Moldova, for example, the share of children in the poorest quintile who are exposed to 'dirty' fuels is double or nearly double the share for all urban children.

**Table 3.18 Prevalence of 'dirty' fuels as the main source of heating (per cent)**

	All individuals	All children	Children			
			Urban	Urban – poorest quintile	Rural	Rural – poorest quintile
Albania	64	68	40	59	85	95
Bulgaria	62	64	48	74	98	99
Moldova	64	67	14	26	92	95
Russia	19	22	8	16	52	63
Tajikistan	76	77	32	43	93	94

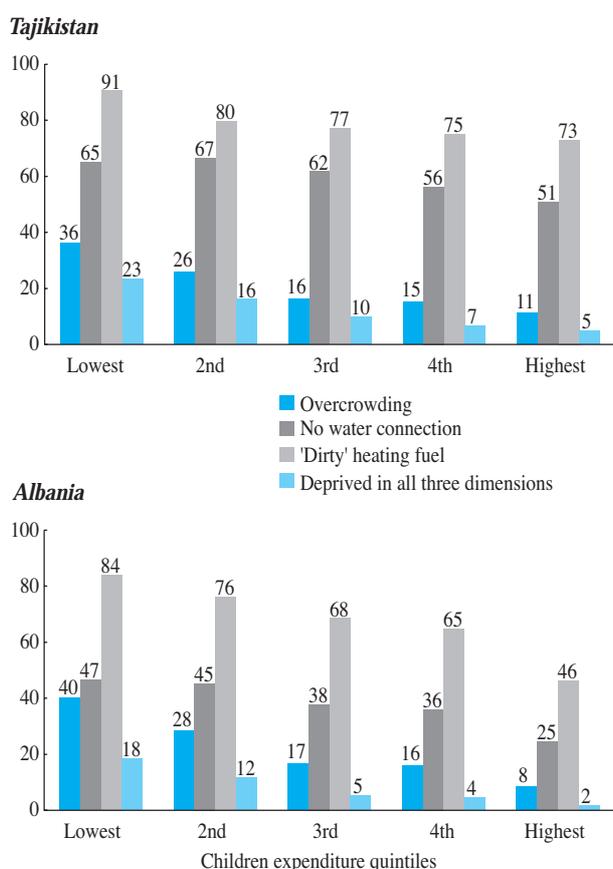
'Dirty' fuels are considered to be firewood, charcoal, crop waste, coal and solid fuels in general.

Source: Albanian Living Standards Measurement Survey 2002; Bulgarian Integrated Household Survey 2001; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003; Tajikistan Living Standards Survey 2003.

## Housing: multiple deprivation and policy recommendations

The sections above examine separately the effect of three different types of housing deprivation on children. However, it is likely that some children experience more than one type of housing deprivation. Survey data can provide evidence on the extent to which children suffer from 'multiple' housing deprivation. Connections to a public infrastructure have always been stronger in urban areas, and this suggests that multiple housing deprivation among children is more likely to be a rural than an urban phenomenon. This is the case in Moldova, where children in urban households suffer more overcrowding but are quite well served by the water system and 'clean' fuel distribution: multiple deprivation affects less than 2 per cent of urban children, compared to about 7 per cent of rural children. In Albania, less than 3 per cent of urban children suffer all three kinds of housing deprivation, while in rural areas the share is 12 per cent. In Bulgaria, multiple deprivation in housing appears to be concentrated in two regions, Bourgass and Plovdiv.

**Figure 3.6 Housing deprivation for children in Tajikistan and Albania (per cent of children)**



Expenditure quintiles are for the child population only.

Source: Tajikistan Living Standards Survey 2003; Albanian Living Standards Measurement Survey 2002.

Figure 3.6 reports the data on housing deprivation among children by income quintile. In Albania and Tajikistan multiple housing deprivation is higher among children in the poorest quintile, and decreases steadily in line with increases in income levels.

In Russia, more than three quarters of urban children do not experience any form of housing deprivation, while a further 11 per cent live in overcrowded conditions but do not suffer from the two other forms of housing deprivation (see table 3.19). The situation deteriorates for children in the poorest quintile and, in particular, for those living in large households (with three children or more). In rural areas the housing conditions experienced by the child population are worse: 20 per cent of children in large families experience all three kind of housing deprivation.

**Table 3.19 Housing deprivation in Russia, 2003 (per cent)**

Type of housing deprivation	Urban children			Rural children		
	All	Living in		All	Living in	
		low income households	large households		low income households	large households
No housing deprivation	77.7	59.4	49.6	32.4	20.9	19.5
Only overcrowding	10.9	18.9	28.4	2.8	3.4	3.5
Only 'dirty' fuels for heating	2.3	3.6	1.3	9.9	8.6	6.5
Only no water connection	2.6	3.9	3.4	13.0	12.1	9.3
Both overcrowding and use of 'dirty' fuels	0.3	1.0	1.1	0.9	1.2	0.9
Both overcrowding and no water connection	0.7	2.6	2.0	1.9	2.9	5.4
Both 'dirty' fuels and no water connection	4.2	7.2	8.5	32.0	36.3	34.5
All three kinds of deprivation	1.3	3.4	5.7	7.1	14.6	20.4
Total	100	100	100	100	100	100

Low income households are defined as households in the lowest expenditure quintile. Large households are those households with three children or more.

Source: Russia NOBUS Survey 2003.

**To summarize:** This section has presented evidence showing that large sections of the child population in all countries of the region experience some form of housing deprivation. The housing stock is ageing and state support for housing has been reduced; as a result, many families live in substandard dwellings. Larger household size and more children living in the house-

hold are associated with both a higher risk of income poverty and a higher probability of living in an overcrowded dwelling. The probability that households in the poorest income quintiles will live in overcrowded dwellings is well above the national average. The other dimensions of housing deprivation (access to safe water and 'clean' fuel) are more strongly associated with geographical location than with the size or income level of the household: in most countries of the region, rural areas are underserved by basic utilities such as water and heating networks. This is largely a continuation of the urban bias fostered in the pre-transition period. But there are also large numbers of urban children – in particular those living in the poorer households – who now experience lack of access to water and/or have inadequate access to 'clean' heating sources. Lack of public investment in improving and extending the utility infrastructure has meant that many of the existing networks are in a state of disrepair, and that there are frequent interruptions in the supply of water, gas and, sometimes, electricity.

It should also be noted that for many households in the region, the greater opportunity to buy, construct and repair private housing has meant vastly improved housing conditions. But the evidence presented here shows that there are large numbers of households which have not been able to take advantage of these opportunities, and they are living in substandard housing. The growth in inequalities in income is mirrored in growing disparities in living conditions. The living environment is important for the well-being and development of the child and therefore needs to be considered as an important and integral part of the services and support extended by the state to families. Making affordable, adequate housing available through support for access to home loans is an essential area of support to young couples contemplating a family and also for large poor households. Monitoring housing conditions, access to safe water, sanitation and heating infrastructure is an essential step in developing a strategy to upgrade housing in the region. Investments in public utilities are equally important, and priority should be directed to the poorest regions and to the poorest part of the population.

### 3.4 Children deprived of parental care

During the transition, most countries of the region experienced a rise in the number of children growing up without parental upbringing or in incomplete families (as briefly discussed in chapter 2). Numerous studies in the post-war period have shown that inadequate parental guidance and reduced parent-child interaction affect the child's physical and emotional development, their health as well as school attendance and educational achievement, and can be a factor contributing to risky or unhealthy behaviour patterns later in life. The effects

of parental deprivation experienced by an infant, particularly in the first three years of life, can be long-lasting, and the longer the child is deprived of parental care, the more enduring the effects tend to be. The effects of institutionalization on child development in the region are well documented.<sup>57</sup>

The CRC reaffirms the right of all children to grow up in a family environment, and considers institutional care as a last resort for children who are deprived of parental care. States are required to support and provide assistance to families in their child-rearing responsibilities, to prevent family breakdown and support families at risk. As argued throughout this report, one of the reasons why child poverty requires separate study is the fact that, as a result of their vulnerability and evolving personality, children are particularly reliant on parents and the family, the society and the state to take decisions and action to promote children's well-being and the enjoyment of their human rights. This section deals with children who, being deprived of family care, are particularly dependent on the agency of the state to ensure their care, protection and welfare. In order to honour their commitments to the CRC, governments in the region are expected to develop targeted strategies to provide support to this small but growing section of the child population.

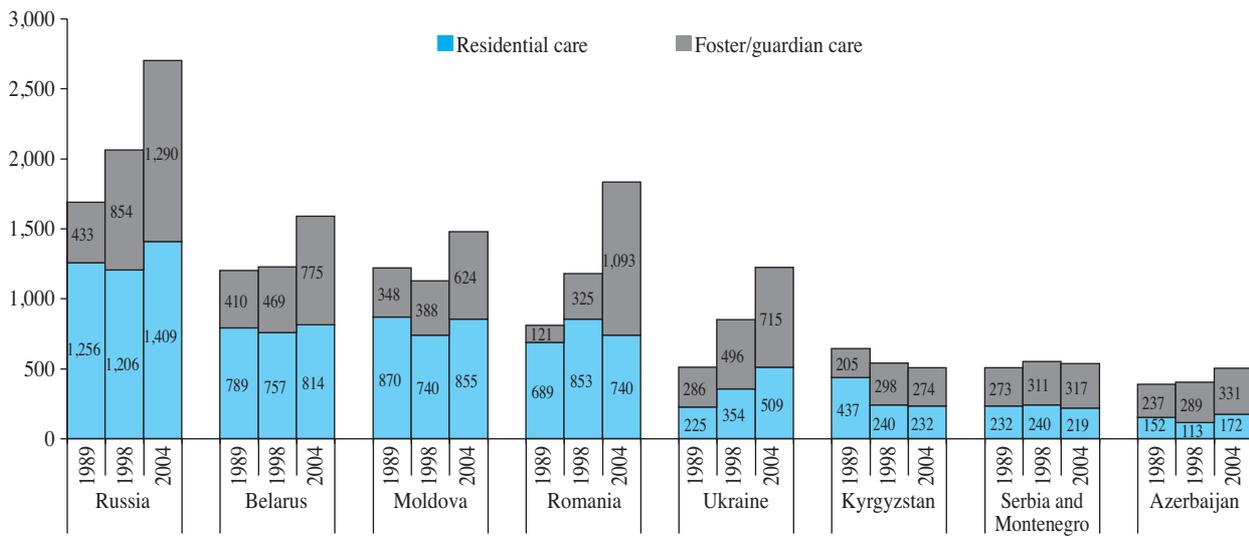
#### Public care: children living in institutions

The underlying ideology of the socialist period gave rise to the belief that the state could provide better services to ensure the care of children than parents, and that institutional care was a more than acceptable form of child care. In the Soviet Union in the 1980s, an additional 10,000–20,000 children were placed in institutions each year compared to the 1970s; one in seven had parents who had been deprived by courts of the right to bring up their children.<sup>58</sup> However, the attitude to institutional care varied throughout the region, with the western Soviet republics, Romania and Bulgaria, having higher rates of institutionalization than the Central Asian and Caucasus republics and the former Yugoslavia.<sup>59</sup> This pattern continues today.

Although there has been a fall in the absolute number of children in institutions compared with the situation in 1990, the fact that the child population is also shrinking means that, in some countries, the rate of placement in institutions has actually risen, as shown in figure 3.7 for the period between 1998 and 2004.

During the period of transition, there has been a rise in cases of families in distress, and parents who feel they are unable or cannot afford to keep their children. The decline in material living standards for many families, together with the emotional stress caused by economic insecurity, unemployment, overcrowded housing, migration<sup>60</sup> and in some cases conflict situations,

**Figure 3.7 Children aged 0–17 living in residential public care institutions or in foster/guardian care (per 100,000 children aged 0–17), selected countries**



For specific information on data for each country, see notes in the Statistical Annex, tables 6.1 and 6.4.

Source: TransMONEE Database.

placed great pressure on the family structure, and contributed to an increase in the number of children placed in institutions. The majority of children in institutions are so-called ‘social orphans’. Poverty, social marginalization, single-motherhood, chronic illness and the child’s disability are among the main reasons for placement of children in public care institutions.<sup>61</sup> In Ukraine, for example, child orphans represent about 20 per cent of the children living in institutions, and the remaining children have been placed due to poverty or the inability of parents to fulfil their parental responsibilities.<sup>62</sup> In Russia the number of families who were ‘not able to fulfil their parental responsibilities’ rose from 200,000 in 1998 to nearly 300,000 in 2001. Abandonment is one of the most important reasons for placement in infant homes and it is particularly high for young children in Romania, where in 2004 about 4,000 children were abandoned in maternity hospitals – 1.8 children per 100 births – and about 5,000 children were abandoned in hospitals or paediatric wards.<sup>63</sup>

There is little tradition in the region of setting up alternatives to child institutional care and the latter has been often perceived as the first rather than the last choice for vulnerable families. At present, state services providing social support to families in poverty and in distress are on the whole still few; furthermore these services are part of complex systems which lack coordination. In spite of a growing awareness since the beginning of the 1990s of the harmful psychological and developmental effects of institutionalization, there has been only a slight shift towards family-based care and foster families.<sup>64</sup> Moreover there is still a lin-

gering conviction in many countries that institutional care – if better financed – can work in favour of children. As observed above, the share of children living in public care continued to rise in some countries of the region: in Russia, the percentage of children in institutions rose from 1.2 in 1998 to 1.4 in 2004.

Subnational variations in the prevalence of children deprived of parental care are also common. In the case of Ukraine, the eastern and south-eastern regions reported the highest rates and greatest increase in institutionalization in the country in 2004. It has been hypothesized that the higher rates in these areas are associated with the greater degree of urbanization and income inequalities.<sup>65</sup> A study of institutionalization in Bulgaria covering the period 1998–2001 reports that Roma children are overrepresented in institutions.<sup>66</sup>

The increase in the number of children being placed in institutions came at a time when budget reductions meant that the services and care provided were difficult to maintain or expand. As in health and education, the budget for maintenance and running costs suffered most. Studies for Kazakhstan and Kyrgyzstan show that the condition of the buildings is often very bad, with a lack of adequate hygiene services and sewerage, a lack of supply of basic necessities, such as beds, linen and medicines, and with water supply and heating systems in need of substantial repair.<sup>67</sup> In extreme cases, this has resulted in closure, with no alternative public services or support available for families who cannot or do not want to assume the responsibility of taking care of their children. In Georgia, for example, children’s homes were forced to close down because

of lack of funding, and their closure has been linked to a rise in the number of street children;<sup>68</sup> similarly, in Tajikistan there has been an increase in the number of children begging or working on the streets in the main cities because of the closure of institutions.<sup>69</sup>

While institutions struggle with rising costs, a number of studies have shown that institutional care is significantly more expensive than alternative family-based options. A study in Romania in 1998 showed that institutionalization cost between 10 and 15 times as much as family reintegration, and similar calculations were done for Ukraine, Moldova and Russia in 2001–2002. Compared with state institutional care, the cost of community or small group home care was estimated to be approximately half; the cost of foster care about one fifth to one third; and the cost of family support or social services approximately one eighth.<sup>70</sup> However, although potentially there are long-term savings and certainly long-term benefits in developing alternative solutions which allow children to live in a family environment, it is recognized that closing institutions and transferring to alternative arrangements would need some initial investment, and there would also be a need for the systems to work in parallel for a certain period.

Adoption is an important option for children who do not have a family or cannot be cared for by their parents. It is often considered relevant and positive particularly for very young children, because it provides them with permanency in a new family. In many countries of the region, national adoption has often failed to be given due consideration, while, in some cases, worrying trends towards intercountry adoption solutions have emerged. In the light of the CRC provisions and the Hague Convention on Intercountry Adoption,<sup>71</sup> intercountry adoption needs to be considered only when it is in the best interests of the child and alternative family care solutions at the national level are not available or not adequate. In some Western CIS countries the share of international adoption has grown substantially since the mid-1990s. In Russia in 2002, the number of annual intercountry adoptions of children age 0–3 surpassed that of domestic adoption, and in 2004 they accounted for about 60 per cent of total adoption. On the other hand, after a huge increase in the mid-1990s, the share of intercountry adoption has decreased sharply in Romania.<sup>72</sup>

### 3.5 Conclusions

Trends in the indicators of non-income child deprivation in the post 1998 period are mixed: they have tended to improve slowly, stagnate, or in some cases deteriorate. The comparatively slow and uneven improvements in child well-being are signs that the fruits of economic growth have not been evenly distributed. The analysis has highlighted large and, in some cases, growing intra-

regional variation, which overall – albeit with some exceptions – follows the same pattern as income poverty. The data analysis also shows that the different types of child deprivation examined in this chapter are fairly consistently associated with certain factors, such as residence in rural areas or in particularly disadvantaged regions, large families, and low household income. In some cases, ethnicity is also a factor associated with deprivation for children. The overall picture is that child poverty and deprivation are becoming more consolidated and concentrated in certain areas, and that disparities among population groups are growing.

This chapter has shown that child well-being depends not just on income resources, but also on parental and governmental decisions on how resources are allocated. Data constraints limit the possibilities of studying the allocation of resources within the household, and assessing how parents are prioritizing household resources. Government priorities as reflected in expenditure levels on health, education and social and basic infrastructure were examined, and pointed to a lack of focus on improving the public services on which children are particularly reliant, while reforms aimed at improving the delivery and efficiency of health, education and other social services remain largely incomplete. In many parts of the region, public services are still functioning on the basis of an underfunded version of the pre-transition delivery mechanisms. This has led to a radical deterioration in the quality of services, and also in the access for the poor, since either formal or informal payment is now expected for many previously free services.

Each section of this chapter has highlighted some of the particular policy responses needed to promote greater equity, universality and quality. Governments in particular need to address the several factors hindering rationalization and improvements in the delivery of public social services to make them more efficient and relevant. These factors include the habit of trying to maintain or re-create systems which existed before transition regardless of whether they are suitable or feasible in the new conditions. In addition, there is the challenge of rationalizing staffing needs and increasing wages in all public systems. Other factors hindering reform include the fears of certain professional elites that their income-generating possibilities will be reduced if the current blur between private and public provision is removed, coupled with the fears of some providers of increased accountability to their users; and lack of changes in budget allocation mechanisms.

Chapter 1 stressed the three principles of human rights which are central to the study of child poverty, namely universality, accountability and the monitoring of progress in the realization of human rights. Respect for these principles requires that governments act to guarantee universal access to public social services of

quality, that the providers act with transparency and can be held accountable by users, and that efforts are made to allocate resources to protect those belonging to the most vulnerable groups, and to steadily reduce disparities. Unless governments act more decisively to tackle these challenges, the time aspect of child pover-

ty – the long-term effects of the different aspects of child deprivation described in this chapter – imply that large sections of the next generation will lack the capacities required to exit from poverty, and that the divisions between poor and non-poor will become more pronounced.

# 4 SOCIAL TRANSFERS AND CHILDREN

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The analysis in the previous chapter has shown that there are often clear links between low household income and various types of deprivation. In particular, the analysis highlighted the extent to which children in large households are deprived in terms of both income and non-income indicators across all countries, and also how children in regions with large child population shares tend to experience greater degrees of poverty. Moreover, these differences have been strengthened in recent years, suggesting that children are not sharing equally in the economic growth experienced across the region.

This chapter looks at state support to families with children in the form of cash benefits.<sup>1</sup> Given the significance of household income for promoting children's well-being, it is important to examine the role played by governments in directly supporting that income through tax and transfer policies beyond the macroeconomic and sectoral policies aimed at employment generation and income growth. In rural areas in many countries, cash income, which can be converted into several different types of expenditure, is often in short supply, because a large part of households' consumption is constituted by, for example, food produced by themselves or received as a gift. In addition, the analysis in chapter 3 has shown that public expenditure on health and education services is low, and households have been compensating by paying for services from their own resources. This has meant that children living in poor households miss out, for example in terms of basic health services and

of attendance at non-obligatory levels of school, and in access to school materials. Cash income is important for children in poor households to increase their overall standard of living, to help keep up adequate nutrition levels, as well as to enable access to public social services, including those which are formally free.

The analysis in this chapter shows that, in many countries in the region, the impact of direct state financial support for families with children is mixed. In terms of coverage, households with children appear to receive some direct support from the state in most countries. While this is in part the outcome of schemes that are targeted on households with children, it is also an 'accidental' by-product of the sizeable public pension schemes operating in most countries; that is, households with children are receiving state support not because they have children, but because they have a household member who is entitled to a pension. However, despite the high share of households receiving state support, in many cases the public cash transfers do little to reduce poverty among those children identified in chapters 2 and 3 as particularly vulnerable – those living in rural areas, in regions with high child population shares, and in households with three or more children. The principal reason is that the absolute value of cash transfers is usually very low.

This chapter is divided into four parts. Section 4.1 examines the overall size of the public social transfer budget across the region, and presents an estimate of the percentage of this total which goes towards house-

## BOX 4.1

### Government revenue generation

The level of public expenditure on health and education services, as well as on social transfers, depends not just on political decisions and economic growth, but also on the extent to which countries are able and willing to collect financial resources. During the central planning period, government revenue was mainly constituted by direct transfers from the state enterprises, which dominated the economy. With transition this sector has been replaced by a mix of private, state and mixed ownership, and economic activity in the informal sector has grown as opportunities in the formal sector have contracted. The result has been radical changes in the structure of revenue generation and an initial decline in its overall level.

In the 1999–2002 period, the share of government revenues in GDP varied considerably across the region, from relatively high levels in Belarus, Croatia and Bulgaria (at more than 40 per cent of GDP, comparable to levels in the European Union) to much lower levels in Azerbaijan, Georgia, Kazakhstan and Tajikistan (comparable, at less than 20 per cent, to low income

countries). Now the bulk of revenue comes from taxes, mainly but not only indirect taxes, and compulsory social contributions. In all countries of the region, indirect taxation contributed most to tax revenue in 1999–2002, ranging from 29.5 per cent in Russia to 49.4 per cent in Tajikistan and 53.8 per cent in Kyrgyzstan. In most countries, compulsory social contributions are the second most important component of government revenue, the exception being all of the Caucasus countries and some countries in Central Asia. Taxes on income (individual and corporate income) account for more than 30 per cent of government revenue in Azerbaijan and Kazakhstan, but in the other countries their role appears to be more limited. Russia has been a forerunner in the region by introducing a flat tax rate for personal income tax in 2001, and the average contribution of taxes on income to general government tax revenues was 25.9 per cent (for 1999–2002). Other taxes, such as taxes on property, are significant only in some countries such as Albania, Azerbaijan, Tajikistan, and also Russia.

The contents of this box are drawn and adapted from Grabowski and Tomalak (2004).

holds with children. It also analyses the distribution of pensions, by far the largest programme in terms of both money spent and number of overall recipients in every country for which there are data. Section 4.2 examines more closely family benefits and other public schemes to provide cash support specifically to families with children, which exist in most countries in the region. Section 4.3 looks briefly at the coverage and impact of maternity benefits in the region, while section 4.4 concludes with an appraisal of the effectiveness of social security programmes in different countries in terms of their capacity to support households with children.

#### 4.1 Public social transfer budgets

Across the region, social transfers represent a significant part of the public budget, and in many countries, the majority of children live in households receiving at least some public transfer. However, the predominance of pensions means that, in general, public transfers are poorly targeted on households with children, simply because they are mostly not designed to reach them.

##### The size of the public social security budget

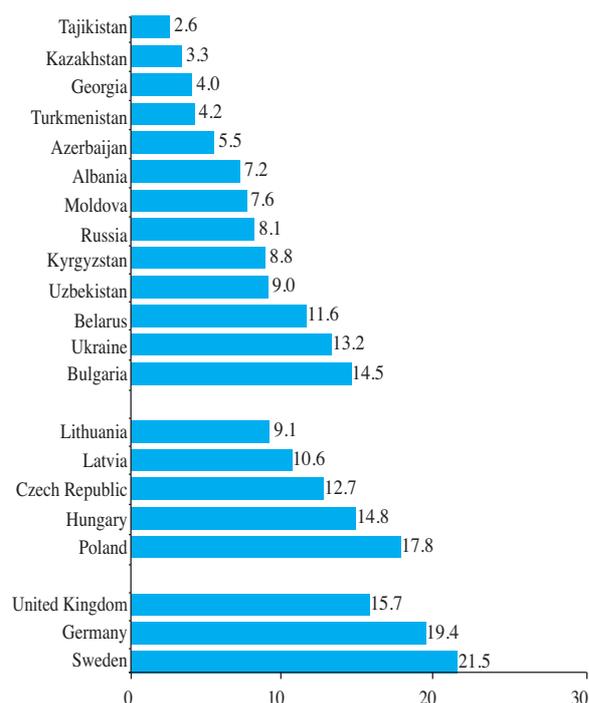
In its broadest sense, social security can be thought of as those public programmes providing direct support to individuals and families (usually in cash, but sometimes in kind), because they have contributed to a public social insurance scheme, or because they belong to a particular category or group, or because their resources are so low that the state agrees to supplement them, or a combination of these. Examples of contributory programmes include most pension schemes and unemployment, sickness and many maternity benefit

schemes. In general, only those people who are formally attached to the labour market through the payment of social insurance contributions can benefit from such schemes. Categorical programmes would include child benefits, where cash may be given to families as a right simply because they include children under a certain age, or some disability pensions, where disability entitles a person to payments.

Social assistance is the most commonly used term for a means-tested programme, when the state provides cash or in-kind benefits to increase the resources of individuals or families because they are estimated to fall below a set threshold. However, in many countries unemployment payments, disability payments and child benefits are also means tested. A means test is (or perhaps should be) a bureaucratic assessment of a family's resources, usually carried out by a public service agency. It can involve the counting of income flows to household members, such as earnings from employment and income from pensions, but can also involve estimates of the value of home-produced consumption, or the expected income from assets (for example, savings in a bank, or property in land or other productive assets), or from the sale of goods such as consumer durables. A means test can also involve an assessment of the prospects of household members for finding employment, or for receiving help from family members who may live elsewhere.

In the pre-transition period, social security systems were large, mostly because of the extensive system of pensions and other benefits that could be claimed by war veterans and people who had reached retirement age, but also in part because in many countries there was support for low income families with children. The social security systems are still large today: in

**Figure 4.1 Public expenditure on social security and social assistance, 2003 (per cent GDP)**



Data on social security and social assistance refer to total government expenditure on cash transfers. Data for Albania and Kazakhstan refer to 2002. Data for Germany, Sweden and the United Kingdom are from the OECD Social Expenditure Database and refer to 2001.

Source: TransMONEE Database; OECD Social Expenditure Database.

coverage, if not always in terms of share of public expenditure or size of benefits.

Data on public expenditure on social security (figure 4.1) show that total state commitments as a percentage of GDP in Ukraine and Bulgaria compare well with those in the new European Union accession countries, and also with the United Kingdom. At the other end of the scale, commitments in Tajikistan, Kazakhstan, Georgia and Turkmenistan are considerably lower, not only than those in EU countries, but also than in neighbouring Kyrgyzstan and Uzbekistan. Over time, total commitments have tended to increase in Bulgaria, Ukraine and Belarus. In Kyrgyzstan and Uzbekistan commitments have remained fairly constant as a percentage of GDP, while in Albania, Kazakhstan and Tajikistan they have tended to decline.

Recent trends in social security spending as a percentage of total government expenditure have also been mixed, as table 4.1 shows. In general, those countries spending the most as a percentage of GDP have tended also to increase their spending on social security as a percentage of public expenditure, while those spending the least have tended to reduce it. In particular, expenditure on social security has fallen heavily as a

proportion of government spending in Azerbaijan – from 30 per cent in 1995–1998 to 21 per cent in 2001–2003. In Albania, Tajikistan and Uzbekistan, too, the share of social security in government spending fell through the late 1990s.

**Table 4.1 Public expenditure on social security and social assistance as a proportion of total public expenditure, 1996–1998 to 2001–2003 (per cent)**

	1996–1998	2001–2003
Albania	24	22
Bulgaria	32	37
Belarus	26	27
Moldova	21	24
Russia	18	25
Ukraine	30	36
Azerbaijan	30	21
Georgia	20	22
Kyrgyzstan	27	30
Tajikistan	18	14
Turkmenistan	15	18
Uzbekistan	29	25

Data on social security and social assistance refer to total government expenditure on cash transfers. Where possible, the figures provided in the table are the average for the 3-year period.

Source: TransMONEE Database.

Old age pensions represent a very large share of public social security transfers. Table 4.2 reports the results of an International Labour Organization survey of Ministries of Finance in SEE countries and in Moldova:<sup>2</sup> in 2003, with the exception of Serbia and Montenegro, old age benefits accounted for more than half of non-health social security benefits, while child-related benefits ranged from 1 per cent in Albania to 8 and 9 per cent in Bulgaria and Serbia, countries where the share of children in the total population is actually lower than in most countries in the region.

**Table 4.2 Breakdown of (non-health) social security benefits in selected countries, 2003 (as a percentage of total social security expenditure)**

	Share of category of (non-health) benefit in all social security benefits			Total share
	Child-related benefits	Old age benefits	Survivor benefits	
Albania	1	61	5	67
Bulgaria	8	66	1	75
Moldova	5	61	3	69
Montenegro	5	42	16	63
Romania	6	55	10	71
Serbia	9	44	14	67

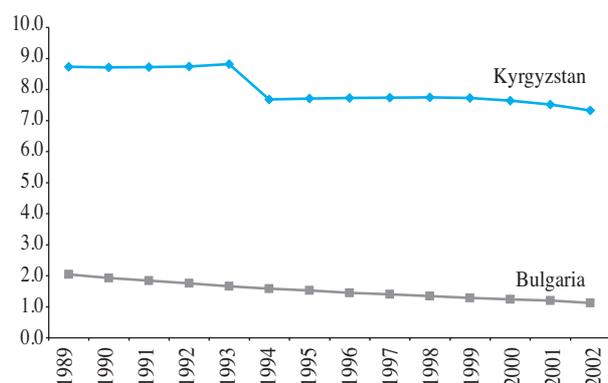
The different categories of benefits follow the ILO functional classification. Child-related benefits include family and children's benefits, maternity benefits and benefits related to the social security functions of the education system.

Source: ILO (2005).

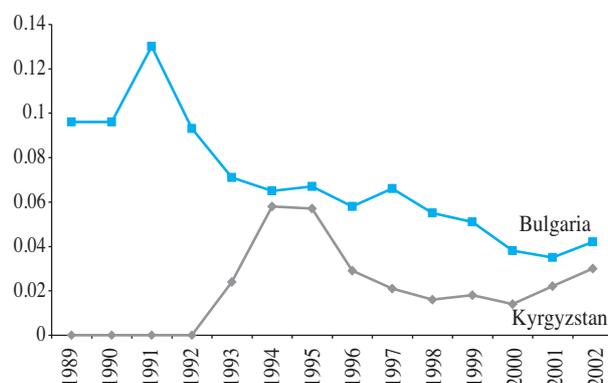
Changes in the demographic structure of the population are one explanation for the large and increasing share of old age transfers in total social expenditure. However, there is evidence that until recently in some countries the per capita amount of child-related transfers had decreased relative to the per capita amount of old age transfers. Figure 4.2 shows trends in Bulgaria and Kyrgyzstan in the ratio of children to pensioners in the population, and in the ratio of public expenditure on child benefits per child to expenditure on retirement pensions per person aged over 65. In both countries, the number of children relative to the number of individuals aged more than 65 declined, more markedly in Bulgaria. But at the same time, the per-child public expenditure on child benefits relative to per capita public expenditure on old age pensions declined for most of the period and stagnated, or increased only modestly, in the last few years.

**Figure 4.2 Trends in child and elderly populations, and relative public expenditure on children and old persons, Bulgaria and Kyrgyzstan**

*Ratio of children (aged under 18) to old people (aged 65 and over) in the population*



*Ratio of public expenditure on child-related benefits per child to public expenditure on pensions per old person*



Source: TransMONEE Database; World Bank (Europe and Central Asia).

## The overall impact of social security on households with children

In SEE/CIS countries, large numbers of people live in households receiving some kind of public social transfer. This is the case in both Albania and Armenia, where public expenditure on transfers is quite low by regional standards, at 7.2 per cent and 5.2 per cent of GDP. In Albania, it has been estimated that six in ten people live in households receiving a transfer,<sup>3</sup> and in Armenia three in ten.<sup>4</sup> Table 4.3 shows that many children gain from public social transfers. These data give some idea of the scale of public transfer systems in the region, not only in terms of levels of public expenditure, but also in terms of the infrastructure in place to oversee and administer these payments, and perhaps also in terms of public awareness of the role of government in supporting household incomes. In Tajikistan, with the regional lowest level of public expenditure on social security as a percentage of GDP, over a third of all children live in households which benefit from public transfers, even if many more are living in poverty. In Albania, half of all children benefit, four in five in Russia, and even more in Bulgaria. In most other countries across the region too, signifi-

**Table 4.3 Impact of social security on the incomes of households with children in five SEE/CIS countries**

	Albania	Bulgaria	Moldova	Russia	Tajikistan
Share of children living in households receiving <i>any kind</i> of social security benefit	49.6	85.8	39.4	78.8	37.7
Average receipt as share of total income, all children	15.7	20.3	9.6	17.6	11.9
Average receipt as share of total consumption, all children	8.5	17.7	9.2	19.3	2.0
Average receipt as share of total income, children in receiving households only	32.5	23.6	24.4	22.3	32.6
Average receipt as share of total consumption, children in receiving households only	17.2	20.6	23.3	24.5	5.4
Average receipt as share of total <i>cash</i> consumption, children in receiving households only	20.7	23.3	44.7	27.3	6.9

Source: Albanian Living Standards Measurement Survey 2002; Bulgarian Integrated Household Survey 2001; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003; Tajikistan Living Standards Survey 2003.

cant numbers of children live in households receiving public transfers.

Table 4.3 also shows that the size of transfers to households with children varies considerably among countries. In Tajikistan, their average value as a proportion of total per capita consumption is low, but in the other countries it is significant, equal in value to between a sixth and a quarter of per capita consumption of the households receiving the transfer. The value of social security transfers is even more important if we look only at cash consumption, i.e. those things the household buys with cash, and excluding the value of consumption of food or other items produced by the household itself. In Moldova, for example, the share of social security transfers in cash consumption expenditure for households with children is about 45 per cent, compared with about 23 per cent of total consumption expenditure. One important function of cash transfers in the region is to give households extra flexibility to spend as they see fit. Even though food and other items produced by a household for its own consumption do contribute to its overall well-being, it may not always be easy to convert this into the cash needed to pay for health care, education or clothing for children.

Table 4.4 shows receipt of different types of social security payments among households with children in Bulgaria. Excluding children's benefits, in 2001 the scheme with the greatest reach among children was the public pension scheme – over a quarter of all children lived in a household with at least one person receiving a public pension. Fifteen per cent of children also lived in households where somebody received an unemployment benefit, while smaller percentages of children lived in households receiving maternity ben-

efits, and transport and other benefits. Children's benefits reached circa two thirds of households with children, although their average value was quite low.

## Pensions

Across the region, the vast majority of public social security spending is on pensions. There are clear reasons for this, including the large numbers of people who in the past contributed to social insurance schemes, either explicitly, or implicitly, as part of a social contract between the state and workers; a demographic trend, apparent across most of the region, towards an increase in the population above retirement age; and early retirement ages – 55 for women and 60 for men, sometimes younger in the case of particularly hazardous or arduous occupations. In some countries the after-effects of armed conflict have added considerably to pension costs. For example, the government of Bosnia and Herzegovina estimates that transfers to veterans amount to about 4 per cent of GDP, representing a major burden on the state budget and reducing the funds available for providing assistance to other vulnerable groups: at the beginning of the 2000s expenditure on transfers to veterans was 13 times higher than the budget allocation for child benefits.<sup>5</sup>

While it is difficult to obtain consistent data across countries on the relative importance of pensions and other types of social security payments, most analyses for individual countries underline the importance of the former. The International Monetary Fund estimates that the Albanian government spent US\$330 million (or 5.4 per cent of GDP) on pensions in 2003, compared with \$30 million for the next biggest programme, the means-tested Economic Assistance.<sup>6</sup> In Uzbekistan in 2000, pensions amounted to 7 per cent of GDP, while child and other benefits for families with low incomes accounted for just 1 per cent.<sup>7</sup> Differences in how they are funded mean that it is difficult to compare public expenditure on pensions with that on other social transfers. Pensions, formally at least, are funded from social insurance funds that are kept separate from general government budget operations, although in the transition period they have often in practice received subsidies from the state budget. On the other hand, family benefits and other means-tested social assistance benefits are in principle funded from general

**Table 4.4 Receipt of different types of social security payment among households with children in Bulgaria, 2001**

	Percentage of households with children which receive transfer	Percentage of children living in families benefiting from transfer	Payments reaching households with children as percentage of total payments	Amount of transfer received by receiving households, as percentage of the national average expenditure of households with children
Public pensions	28.0	26.2	17.4	17.2
Private pensions	0.2	0.3	38.3	22.4
Survivor's pension	11.0	10.7	34.3	7.2
Disability pension	6.9	8.3	34.2	10.0
Unemployment benefits	15.4	17.7	52.9	9.7
Maternal benefits	10.2	11.7	96.9 <sup>a</sup>	9.8
Children's benefits	64.9	63.5	97.3 <sup>a</sup>	2.8
Other benefits	13.7	17.9	41.8	0.1

<sup>a</sup> Some households may report receiving child benefits in respect of children who have died, who are temporarily absent from the house or who have reached their 18th birthday before the time of the interview.

Source: Bulgarian Integrated Household Survey 2001.

taxation. However, in the transition period there has often been a blur between the two forms of financing, because of the impossibility of relating pre-transition pension contributions to current minimum pension payments. Shortfalls in pension contributions in the transition period have meant that the state budget has had to subsidize social insurance funds. And likewise, social insurance funds have also been used, for example in Russia, to finance social assistance benefits.

In many cases, pensions support the living standards not only of people beyond retirement age, but also of children. This can happen when grandparents (and other relatives) who receive pensions support grandchildren who live elsewhere, for example by giving them meals or helping out with onerous expenses, such as school books and uniforms. In general, this type of support is difficult to measure, and evidence of its impact on child poverty is more anecdotal than systematic. Pensions can also support the living standards of children more directly where grandparents, or other people in receipt of pensions, including parents, live in the same household as the children. In such cases, as was noted in chapter 2, it is assumed that all income is equally shared between all household members. Thus an extra rouble (for example) of retirement pension received by a grandparent who lives with their children and grandchildren is assumed to have the same impact on overall household income as an extra rouble of earnings received by the child's parent.

Table 4.5 shows that among the five countries for which microdata are available, pensions are often an important source of income for households with children: in all five of them, about a third of children live in households receiving income from pensions. However, as might be expected, since receipt is not targeted at children, the pension income is dispersed haphazardly among children in different income groups. In Albania, 36 per cent of children in the poorest quintile of expenditure live in households receiving income from pensions, compared with 24 per cent of children in the richest fifth of the population; at the

same time, the share accruing to the poorest children of the total amount of pensions is 6.7 per cent, about 3 per cent lower than the amount of pensions accruing to children in the richest quintile. In Bulgaria, where the share of children in households receiving pension income is similar in the richest and in the poorest quintiles, the former receive an amount twice that received by the latter. In Russia and Moldova, a larger share of total pension expenditure accrues to children in the poorest quintiles; but the actual per child amount is lower for children in the poorest than in the richest quintiles.

## 4.2 Benefits directed specifically at children

While pensions, not specifically aimed at children, dominate the total public transfer budget, most countries also operate programmes aimed specifically at households with children.<sup>8</sup> However in many countries they are poorly resourced, and moreover in some of them they are poorly targeted or administered, meaning that the poorest children do not actually receive what they are entitled to.

### Types of family benefit schemes

Before the onset of transition, most countries had developed benefits to support families with children, but the level of support was in general quite small. Rather, it was assumed that guaranteed employment, combined with subsidized prices for basic necessities, could ensure an acceptable standard of living for the majority of households. There was, however, recognition of the fact that children placed an extra burden on the family budget, and some efforts were made to compensate for this through the provision of child benefits. In the Soviet Union, child poverty was one of the few social issues addressed directly via means-tested transfers to poor families. From 1947, a child benefit for the fourth child onwards was made available until the children were five years of age. This was

**Table 4.5 The impact of income from pensions on households with children, 2001–2003**

	Albania			Bulgaria			Moldova			Russia			Tajikistan		
	All children	Poorest	Richest												
Receiving (per cent)	34.3	35.8	24.0	34.6	26.6	26.5	29.8	34.8	22.0	32.2	36.9	24.6	35.4	38.4	29.9
Share of total consumption for households receiving	18.1	24.8	11.1	22.5	38.2	12.4	23.0	35.3	11.1	41.9	78.3	17.0	5.4	9.4	2.8
Share of all pension payments	48.9	6.7	9.6	19.4	1.8	3.6	21.5	4.1	3.9	18.4	3.4	3.2	76.6	14.0	17.8

'Poorest' and 'richest' children are those in the lowest and highest consumption expenditure quintiles of children, respectively.

Source: Albanian Living Standards Measurement Survey 2002; Bulgarian Integrated Household Survey 2001; Moldova Household Budget Survey 2003; Russian NOBUS Survey 2003; Tajikistan Living Standards Survey 2003.

the lowest social security benefit. In 1974, child benefits were made available to families with per capita incomes below 50 roubles. The benefit amounted to 12 roubles per month for each child up to the age of eight. In 1985, the income cut-off was increased to 75 roubles per capita, and the age limit was extended to 12 years old. For comparison, the minimum pension in 1987 was 50 roubles, the average pension 80 roubles, and the average wage 216 roubles.<sup>9</sup> Child benefits were available, but were traditionally given low priority compared to other social benefits.

Thus a means-tested child benefit system was not new to the region, but means testing in the Soviet period – when all wages and salaries were centrally regulated – was a much easier administrative task than in the transition period. In fact, in the early years of the transition the problem of means testing was avoided, with child benefit schemes usually designed according to universal principles, meaning that every family with children was entitled to a benefit. However, by the end of the 1990s targeting had become the norm, meaning that only those families with children whose resources fell below a set threshold were entitled to a benefit. At present, Romania stands out as an exception to this pattern, being the one country that has maintained its universal system since it was first introduced in 1993. The universal benefit is complemented by a system of means-tested benefits for low income families and single parents. In Romania, the receipt of all child benefits for children of compulsory school age is conditional on the child attending school.

Table 4.6 (pp. 72–73) summarizes rights to monthly cash benefits across the region. Many countries use a mix of means testing and universal benefits (but with a clear prevalence of means testing), with the latter being available for very young children. In Belarus and Azerbaijan, universal transfers are made until a child is three years old, after which the system becomes means tested. Similarly, in Moldova children up to 18 months receive a universal benefit, after which means testing is introduced. In Tajikistan, children receive public benefits until they are 18 months old, but only if at least one of the parents has made social security contributions; moreover a school-based means-tested benefit is also available for children aged 7–15 years. Several countries provide a universal birth grant.

Child benefits in other countries are generally means tested, although some countries have abolished family benefits altogether. In Albania, a general means-tested cash benefit, Economic Assistance, is available to families with a low income and little possibility of improving their situation. In Georgia most family benefits were abolished in 1995, except for a transfer to children of single mothers and to all second children under 16. Targeted support is available for low income families. Similarly, Kyrgyzstan offers only very limited benefits for specific categories of families, includ-

ing large families, single mothers, twins and triplets. However, it also has a more general social assistance scheme for low income families. Turkmenistan abolished child benefits in 1998 and offers no other financial support to low income families, although they may qualify for some in-kind benefits.

In Russia, where the public transfers system is currently undergoing a broad reform process, most of the social benefits are allocated on the basis of social categories or are insurance based. Child benefits are one of the exceptions. The eligibility rules have changed at various points over the last 15 years: in 1991 a universal benefit to families for all children under 16 years of age was introduced to compensate for the impact of high inflation. In the mid-1990s, the accumulation of arrears in benefit payments caused the central government to decentralize the distribution of benefits to local social security committees, and some regional and local administrations reintroduced means testing for the provision of child benefits. Research has found that the introduction of a new transfer mechanism in Russia in 1994 made for more inequality and that, while expenditure on health and education has been relatively protected against budget cuts, expenditure on social assistance has been cut disproportionately; furthermore, oblasts with higher poverty rates seemed to spend less in social assistance.<sup>10</sup> Between 1998 and 1999, means testing for child benefits was officially reintroduced at the national level and it was established that only children living in families with income below the locally determined subsistence minimum would be eligible for receipt of the benefits.

In at least two cases there is a mix of formal and informal rules for the allocation of support, and local bodies of citizens are in charge of making decisions on eligibility. In the case of Uzbekistan, the decision over who qualifies for child benefits is in the hands of citizens' local community bodies, the pre-Soviet Mahallas.<sup>11</sup> Families with per capita income below a given amount (1–1.5 times the minimum wage) can apply for assistance, and the Mahalla decides allocation depending on the family's other material circumstances and whether it believes the family has the ability to increase its income in other ways (through finding work or better exploiting an agricultural plot). The Mahalla also determines the allocation of more general social assistance benefits for low income families. In Tajikistan, similarly, eligibility for the Cash Compensation Scheme for schoolchildren is determined locally, this time by parents' councils at the school. In one sense, the systems for administering support payments in Uzbekistan and Tajikistan draw on the strengths of local communities in the two countries, and the choice of targeting mechanism in these countries contrasts starkly with the highly centralized administration of means-tested assistance in Armenia, as box 4.2 on p. 74 explains.

**Table 4.6 Family benefits, 2003**

	Eligibility (age and other restrictions)	Means test or universal?	Level of benefit per month 2003 (local currency)	Extras? (e.g. birth grant)
Bulgaria	Under 18 if in full-time education. All covered except those self-employed <i>and</i> without social insurance	Means test (unless long-term disabled). Was universal until 2002	18 leva	Universal birth grant: 200 leva per child
Romania	Under 16 (under 18 if disabled or in full-time education)	Universal since 1993	130,000 lei (double if disabled) plus 50,000 extra if 2 children; 100,000 lei if 3 children; 125,000 lei if 4+ children	Universal birth grant 387,317 lei for first four children
Albania	No specific child benefit. General economic assistance	Means test (unless disabled or blind family member). Income test plus must have limited means to raise income	Decided by local authority	Birth grant to insured parents: one-half of minimum wage
Croatia		Means test	665–1,330 kunas, plus extra 15% eligible single parents and 25% orphans and disabled	Lump sum maternity grant 850 kunas, employment linked
FYR Macedonia	Under 19s (15–18 only if in full-time education). Only first three children eligible. Social insurance based: employment-linked restrictions	Means test: income below 16% average (or 32% for single parents). Plus universal supplement for disabled	4.6% average wage until 15; 7.3% 15–18	Newborn package of products for first-born only
Serbia and Montenegro	Employment-linked restrictions	Means test	900 dinar (plus 30% if single parent or child disabled)	Means-tested birth grant
Belarus	0–16 (or to 18 if disabled)	Universal under age 3; means test 3–16 (unless disabled)	65% minimum subsistence until age 3; 30% thereafter if eligible	Universal birth grant of 200% minimum subsistence level
Moldova		Universal to 18 months; then means test	0–18 months 100 lei if insured; 75 if not. After 18 months 25 lei (3.6% average wage)	Universal birth grant 420 lei first child if insured (300 if not). Subsequent children 280 lei (200)
Russia	Under 16s	Means test (below locally determined subsistence level)	600 rubles until 18 months (35% subsistence minimum); then 140 rubles	Means-tested birth grant (depending on birth order)
Ukraine		Means test (2002 below subsistence minimum of 80 hryvnas)	Benefits defined annually as a share of subsistence minimum (previously share minimum wage). Extra for single parents and disabled children	Universal prenatal benefit plus birth grant of twice subsistence minimum
Armenia	Benefits for low income families target families with adolescent children	Means test. 68% of families received 2003	2,000 drams per adolescent	
Azerbaijan		Universal to 3 years then means test (except children of military, war invalids and martyrs and those who helped during Chernobyl accident)	9,000 manat per child (more for special cases listed)	Means-tested birth grant of 70,000 manat

**Table 4.6 continued**

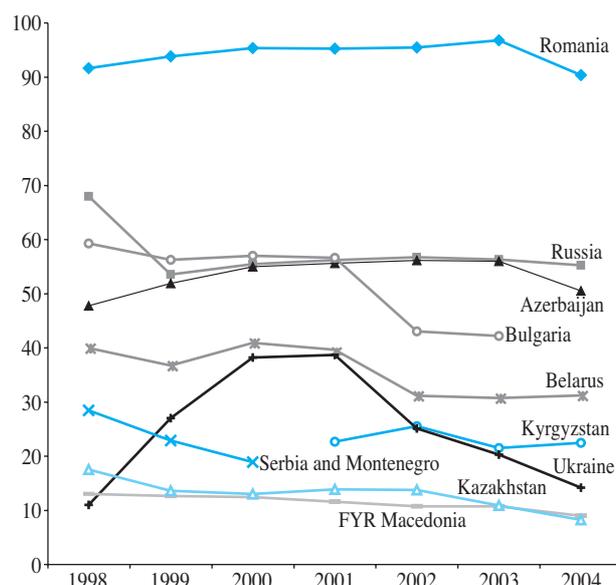
	Eligibility (age and other restrictions)	Means test or universal?	Level of benefit per month 2003 (local currency)	Extras? (e.g. birth grant)
Georgia	Family benefits cancelled 1995, except for benefits for single mothers and second children			
Kazakhstan	Since 2002, no specific child benefit: targeted social assistance to all families below the poverty line	Means test: families below the poverty line (40% of the living wage) receive assistance to bring them up to the line. 8% families qualified 2002; children the largest group. (Plus benefits for disabled and families with four or more children)		Universal birth grant introduced January 2003 (15 Monthly Unit Rates = 13,080 tenge)
Kyrgyzstan	Specific child benefit only for certain categories (large families, single mothers, twins and triplets). Targeted support for low income families	Low income families can receive the Unified Monthly Benefit, aimed at bringing them to the Guaranteed Minimum Level of Consumption (social standard set to ensure poor families, survival). Currently well below subsistence minimum		
Tajikistan	0–18 months on social insurance basis; then 7–15 eligible for targeted assistance	Universal until 18 months (if insured). Means test 6–15. Parents' councils at schools decide eligibility. In 2002 20% received	6 somoni per quarter per child	Universal birth benefit on social insurance basis. 3 minimum wages for first child; 2 for second; 1 for third onwards
Turkmenistan	No specific child benefit since 1998. Low income families (some 15% of population) receive some benefits, such as fee reductions on preschool			
Uzbekistan	Since 1997, child benefit in the hands of citizens' self-government bodies (the Mahallas). Available to families with children under 16 and per capita income below a given minimum threshold. The Mahalla decides which of these families require assistance (taking into account whether they have opportunities to increase their income), and they pay out benefits		50% minimum wage for one child; 100% for two children; 140% for three children; 175% for four plus children	

Source: Stewart and Huerta (2006).

### Numbers and costs

The administrative data in figure 4.3 show trends in the numbers receiving family benefits in practice since 1998. The most evident difference is between Romania, where almost every family with children receives benefits, and all the other countries. The second best performer – in terms of the share of families with children receiving benefits in 2004 – is Russia, where child benefits are paid to just over half of all children. In Belarus, Ukraine, FYR Macedonia and Kazakhstan, coverage has fallen in recent years. In Russia there was a sharp fall in the proportion of children in receipt of child benefit between 1998 and 1999, when means testing was reintroduced, and since then the proportion has remained fairly constant. In Azerbaijan too, there has been little change in recent years, since although the benefits are in theory targeted, the level of per capita income required to qualify for the benefit means that in fact almost all households can apply. Elsewhere, the share of children receiving family benefits from schemes has remained very low. Data for Serbia and Montenegro are not available, but the introduction of means testing for family benefits in 2002 is likely to have had a downward impact on the

**Figure 4.3 Children aged 0–17 receiving family benefits, 1998–2004 (per cent)**



Source: TransMONEE Database

## Box 4.2 Targeting and means testing

While universal and targeted programmes aimed at providing financial support to families with children coexist across several SEE and CIS countries, there has been an increased emphasis on targeting since the early 1990s. This has been fostered in part by governments and also encouraged by some international organizations wishing to see very limited public resources used more efficiently. While under universal programmes, such as the basic family allowance scheme in Romania, payments are made in respect of all families with children, regardless of income, the purpose of targeted schemes is to provide assistance only to families who fulfil a set of qualifying criteria.

Common targeting criteria include belonging to a particular social category (for example, single parent families or disabled children) or living in particular regions of a country assessed as experiencing higher than average levels of disadvantage, or means testing according to indicators such as household income or other characteristics that may be related to household wealth. While, as noted in table 4.6, several countries have maintained universal allowances for very young children (under the age of two), most family benefits in the region are now means tested.

In Albania, for example, Economic Assistance, the main cash social assistance programme for households with children, is means tested. Means tests are established at local level by the municipal and communal councils following national criteria, including non-eligibility of households without dependent members, and of households owning substantial assets or with the capacity to generate wealth or income (World Bank 2003a). The Armenian system is nationally administered and targets extremely poor households using a variety of proxy methods intended to be applied uniformly across the country. Eligibility is based on a series of individual and household indicators, including, for example, size of telephone bills and electricity consumption (World Bank 2003b). In Uzbekistan, on the other hand, assistance to low income households is decided by citizens' local community bodies, the Mahallas. The Mahalla uses a mixture of formal and informal methods to assess the general material conditions of households applying for benefits. Informal means testing at the community level is also used in Tajikistan to disburse assistance to families with school-age children (World Bank 2005c).

When carried out fairly and efficiently, means testing can be a highly effective tool for reducing poverty, since it targets public resources on the poorest households. In practice, means testing is often associated with a range of problems. One is the social stigma sometimes attached to applying, which means that people who are genuinely poor will not apply for the assistance because they are ashamed to ask for help that is clearly aimed at the poor. Another problem is lack of knowledge of the schemes: the poor either do not know about the help available, or they think they would not be eligible. Means testing, particularly if carried out fairly and thoroughly, can also entail high administrative costs, which in some cases can take up a significant portion of the programme's overall budget. Means tests can also produce undesirable disincentive effects, in that households may decide not to increase their earnings (even though they could) because this would mean losing eligibility for means-tested assistance.

Another frequent concern, not least from the human rights perspective, is that formal rules about eligibility (such as the need to furnish specific documents or proof) can sometimes prevent poor people from accessing public assistance to which they would otherwise be entitled. Moreover, excessive bureaucracy and lack of transparency in the system increases the risk of arbitrariness in decisions to award benefits. The World Bank (2003d) has reported consistent exclusion of some poor families from access to family allowance in Uzbekistan, in part because the community committee simply refused to process the application, or because they did not apply an appropriate means test. In the worst scenarios, means testing carried out by public officials can lead to discrimination and corruption. Cases of such behaviour have been documented in several countries in the region, including in Albania, where officials refused help to Roma households without explanation, and in Kyrgyzstan, where one report notes that a single parent was encouraged to pay a bribe in order to gain access to her entitlements (Ablezova et al. 2004).

In general, with universal benefits the risk of exclusion of people in need tends to be low simply because there is less stigma attached to applying for them, because people are more likely to know about them, and because eligibility criteria are clear. Means-tested assistance, on the other hand, is intended to be better targeted on the poor, and to exclude the non-poor. But, as indicated above, it can create disincentive effects for recipients, and in practice means testing never obtains perfect targeting, with some section of the poor remaining excluded (Cornia and Stewart 1995).

numbers receiving them. The Montenegro Poverty Reduction Strategy Paper notes, for example, that the move from universal benefits saw a fall in the number of recipients from 152,000 to 13,000 children.<sup>12</sup>

In most countries, there may be problems of access and take-up of family benefits (and other public transfers) among some families living in particular regions, or belonging to some population groups, or more generally, where the government may claim not to have the resources to pay out entitlements. In addition, administrative capacity, particularly important in the management of means tests to determine and to check eligibility for benefits, is often lacking. Therefore, neither the

absolute number of children benefiting from this kind of transfer, nor trends in receipt over time, are likely to correspond perfectly to the numbers actually entitled to benefits.<sup>13</sup> In the case of Russia, it was estimated that in January 2003 there were large arrears in payments, mostly owed from local budgets.<sup>14</sup> Klugman and McAuley (2001) point to the paucity of many local budgets as one of the main weaknesses in the largely decentralized Russian social security system.

Stigma, discrimination or incomplete information on eligibility may also prevent some families from claiming the benefits they are entitled to. The World Bank notes that in the case of Uzbekistan, while the decen-

tralized administration by local community bodies has many advantages in terms of targeting and local ownership, it may also discourage some people from applying, since assessments of the family's means and decisions about entitlement are supposed to be made in public.<sup>15</sup> Ablezova et al. (2004) cite the views of one person in Kyrgyzstan:

When we go to apply for social benefits, officials don't want to talk to us, or look at us. In the past, the treatment of poor people was good, they had heard our problems and then helped us.<sup>16</sup>

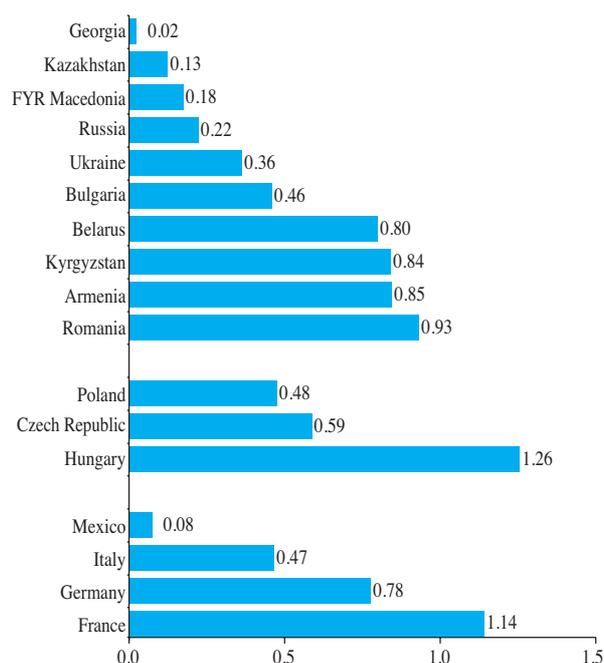
Figure 4.4 shows the level of public expenditure on child benefits as a percentage of GDP, and table 4.7 shows information for recent years on the share of children receiving child benefits in each country, and the average amount received per child. The size of the child population is crucial in determining the relationship between total expenditure, on the one hand, and the share of children who receive child benefits and how much they receive, on the other. Where children represent a large share of the total population, even a highly restricted family benefit scheme can be costly in terms of GDP. Conversely, where there are fewer children, a relatively generous scheme may be possible at relatively low cost. Romania, which has a low share of children in the total population, spends the most on family benefits in the region (almost 1 per cent of GDP). This is not as much as in Hungary, but more than in most Western European countries. As noted above, Romania is the only country to have maintained a universal family benefit.

Public expenditure on family benefits is also high in Armenia, Belarus and Kyrgyzstan, at 0.8 per cent of GDP or more. Armenia's Family Poverty Benefit is received by about 30 per cent of families with children, with generous levels of benefit.<sup>17</sup> In Belarus too, family benefits reach about a third of children, and a family with two children receives on average 14 per cent of the national average wage. In this latter country, however, the share of children in the population is low. In Kyrgyzstan, on the other hand, only about a quarter of children receive family benefit payments, which average less than 5 per cent of the average wage for a family with two children.

Looking again at figure 4.4, levels of public expenditure on family benefits are very low in Georgia (perhaps reflecting the virtual abolition of most types of family benefits in 1995), and also in Kazakhstan, FYR Macedonia, and Russia.

A few countries in the region have no specific income transfer schemes for children, and channel resources through more generalized means-tested social assistance type schemes. This is the case in Albania, where generally small amounts of Economic Assistance are received by about a third of households with children. Both Russia and Moldova have relatively important

**Figure 4.4 Public expenditure on family benefits, 2001–2004 (per cent GDP)**



Source: TransMONEE Database; OECD Social Expenditure Database.

social assistance schemes (apart from the child benefits described above), benefiting considerable numbers of children. In Moldova, for example, social assistance is paid to about one in seven households with children, while one in twelve receives child benefits. Turkmenistan, on the other hand, provides very little cash assistance in any form for families with children.

**Table 4.7 Children in receipt of family benefits, and average amount received, 2002–2004**

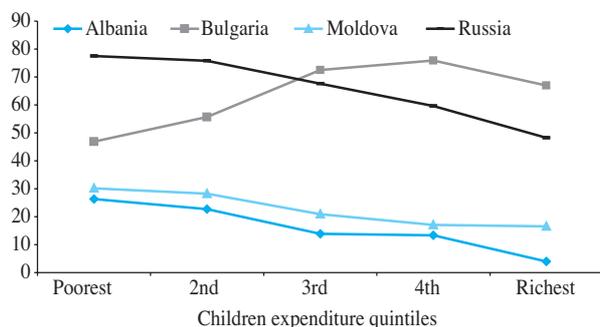
	Expenditure on family benefits as per cent of GDP (average 2002–2004)	Per cent of households with children receiving (average 2002–2004)	Value of average family benefit as per cent of average wage (average 2002–2004)	Share of children in total population (per cent) 2003
Bulgaria	0.46	42.6	n.a.	18.6
Romania	0.93	94.2	n.a.	21.8
FYR Macedonia	0.18	10.2	5.6	25.9
Belarus	0.80	31.0	14.2	21.9
Russia	0.22	56.1	1.3	21.3
Ukraine	0.36	19.8	8.1	20.6
Armenia	0.85	n.a.	n.a.	29.5
Azerbaijan	n.a.	54.2	2.7	34.1
Kazakhstan	0.13	10.9	3.2	32.1
Kyrgyzstan	0.84	23.2	4.7	39.8

Source: Calculated from TransMONEE Database.

## Impact of family benefits

The description of the various family benefit schemes shows that countries in the region have faced decisions on the amount of funds they can dedicate to child benefits, and then on the trade-off between the coverage and the size of the benefit. Survey microdata allow a more detailed examination of the impact of family benefits in three countries which have such schemes – Bulgaria, Moldova and Russia – and also of the impact of the more general Economic Assistance in Albania. In all four countries, the benefits are for the most part targeted through means testing or other mechanisms towards children in households with lower incomes. In Russia, Bulgaria and Moldova, however, there are also universal components of family benefits: for very young children in the case of Moldova and Russia, and at the time of survey for all children in Bulgaria (this was abolished in 2002 – the data examined here are for 2001). In Russia and Moldova, moreover, there are also extensive social assistance schemes that tend to benefit households with children more than any other group, as is the case with Economic Assistance in Albania.

**Figure 4.5 Share of children receiving family benefits and social assistance, by expenditure quintiles (per cent of children), early 2000s**



The expenditure quintiles are defined with reference to child population only.

Source: Albanian Living Standards Measurement Survey 2002; Bulgarian Integrated Household Survey 2001; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003.

Figure 4.5 shows that, in Russia and Bulgaria, high shares of children are in receipt of child benefits, but with a substantial difference: in Russia, where the main component of economic assistance to families with children is means tested, the probability of children receiving the transfers is lower for the richest quintiles. In Bulgaria, on the other hand, where the targeted system only came into force in 2002, the highest percentages of benefits coverage were found for the three richest quintiles. In Albania and Moldova the social assistance programmes reach a limited share

of poor children and children in general, but the distribution of benefits appears on the whole to be more targeted towards the poorest children, with benefit receipt decreasing the higher the level of per capita expenditure.

Table 4.8 examines the distribution of Economic Assistance in Albania. Overall, a low share of households receives this benefit, and although poor children are more likely to receive the benefit, the majority of poor children are in fact not covered by the scheme. While the size of benefits for poor households represents a larger share of their total consumption expenditure than for other quintiles, the actual amount received does not vary much between poorer and richer households with children.

**Table 4.8 Distribution of Economic Assistance in Albania in households with children by children expenditure quintiles**

Children expenditure quintile	Percentage of children receiving Economic Assistance	Share of consumption for households receiving Economic Assistance	Average per capita receipt of Economic Assistance (only for receiving households) as per cent of national average consumption
Poorest	26.3	17.8	6.3
2nd	22.7	12.8	6.7
3rd	13.8	9.6	6.8
4th	13.3	8.6	7.6
Richest	3.9	6.0	8.0

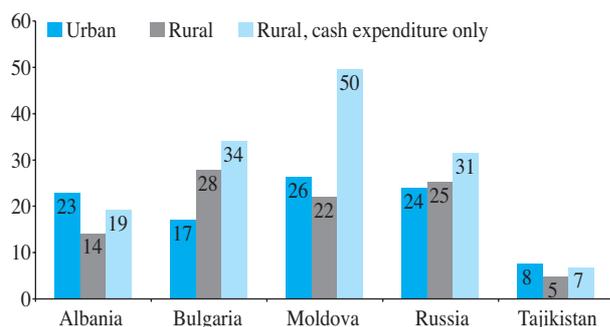
The expenditure quintiles are defined with reference to child population only.

Source: Albanian Living Standards Measurement Survey 2002.

The analysis above on levels and incidence of state support to families in the region suggests that in many countries the amount of public expenditure allocated to these benefits is not proportionate to the number of children living in poor households, that the benefits cover only a small share of children, and that their impact on per capita household expenditure levels is quite limited. Benefits are not sufficiently targeted on poor families, and the size of the transfers is usually not large enough to have a significant effect on the household budget of the poor. Survey data has been used to examine further differences in receipt and impact by place of residence and by other household characteristics.

In all five countries for which data are available, children in rural areas are as likely as, or slightly more likely than, children in urban areas to live in households receiving public transfers. For example, in Tajikistan, 31 per cent of children in urban areas live in households receiving transfers, compared with 40 per cent of children in rural villages. Figure 4.6 shows that in Albania, Moldova and Tajikistan the amount of

**Figure 4.6 Impact of public transfers on the expenditure of households with children receiving the transfers, 2003, in urban and rural areas (per cent)**



Source: Albanian Living Standards Measurement Survey 2002; Bulgarian Integrated Household Survey 2001; Moldova Household Budget Survey 2003; Russia NOBUS Survey 2003; Tajikistan Living Standards Survey 2003.

transfers received by households as a percentage of total consumption is actually larger in urban than in rural areas (in Tajikistan, however, the impact of transfers on consumption expenditure of families is very low). In these countries many urban households gain more than rural households from public transfers. In three out of the five countries, however, the gain to rural households from public transfers is particularly notable if measured in terms of cash expenditure, that is, removing in-kind consumption (mostly from food produced at home by farming households). As noted above, the ability to spend cash is important as it gives households the kind of flexibility they need, for example, to meet extra education or health-care costs. In Moldova, public transfers amount to about half of total cash expenditure among rural families receiving transfers, and in Bulgaria and Russia to about a third. The survey data here confirm that cash benefits are particularly important for children in rural households.

In Albania, survey data show that the distribution of Economic Assistance follows a clear regional pattern. The programme is managed by local authorities which receive subsidies from the central government to pay the benefits, but which are obliged to follow national rules on defining household eligibility for Economic Assistance. The data presented in table 4.9 suggest that children in one of the regions are more likely to receive assistance than those in other regions: the highest share of children covered (42.5 per cent) by the programme is in the poorest region (Mountain), while only 4 per cent of children living in Tirana benefit from Economic Assistance. While targeting to the poorest region is achieved, targeting to poor children within the region is imperfect: about half of the children living in poor households in the Mountain region are in receipt, but also one quarter of those in the richest quintile of the population. In the other three regions, the assistance seems well targeted towards the poorest children, but not all poor children are reached by the system.

In Russia, family benefits for children aged from 18 months to 16 years are provided to families with per capita income levels below the oblast-specific subsistence minimum. Table 4.10 shows the coverage of children aged 2–15 for selected oblasts. Apart from Dagestan, the coverage rate is close to the share of children living in households with per capita consumption expenditure lower than the regional subsistence minimum. However, in all the regions the system does not seem to be reaching the extremely poor (under PPP \$2.15 per capita per day). Again, targeting is working imperfectly, and, worryingly, at the expense of the very vulnerable.

In all countries, public transfers constitute a larger share of consumption expenditure of households without children than is the case for households with children. As the number of children increases, the relative importance of public transfers tends to diminish, because the benefit is ‘diluted’ among more family members. In general, pensions constitute the bulk of public transfers, and they are on the whole allocated to individual adult members, not to children. In Russia and Bulgaria more than 60 per cent of households do not contain children: their per capita consumption expenditure is well above the national average and the value of pensions is equal to about a third of average total household consumption expenditure. The per capita value and the impact on per capita consumption expenditure are notably lower for families with children.

**Table 4.9 Percentage of children receiving Economic Assistance by poverty status, in regions of Albania, 2002**

	Child poverty rate	Total children	Percentage of children receiving Economic Assistance			
			Children living in poor households	Children living in non-poor households	Poorest child expenditure quintile	Richest child expenditure quintile
Coastal	22.0	6.9	14.2	4.8	15.3	1.9
Central	28.7	16.3	25.3	12.7	26.0	2.6
Mountain	36.4	42.5	47.6	39.6	45.4	23.9
Tirana	18.3	4.0	11.4	2.4	9.6	0
Total	26.8	16.0	25.9	12.4	26.3	3.9

The child poverty rate is the percentage of children aged 0–17 living in households where current household consumption is less than PPP \$2.15 per person per day. Poor households are those with a current consumption lower than PPP \$2.15. The expenditure quintiles are defined with reference to the child population only.

Source: Albanian Living Standards Measurement Survey 2002.

**Table 4.10 Children receiving child benefits in Russia: five poor and five rich oblasts (children aged 2–15 years)**

	Child poverty rate (children living in households with per capita consumption lower than PPP \$2.15 a day)	Percentage under the national poverty line	Children aged 2–15 receiving child benefits	Share of poor children (below PPP \$2.15 a day) living in households which are not receiving child benefits
St Petersburg city	1.7	66.4	75.1	66.7
Murmansk Oblast	4.3	68.8	54.5	6.6
Yaroslavl' Oblast	7.3	61.3	54.8	44.9
Lipetsk Oblast	8.7	58.3	58.3	19.6
Orel Oblast	10.3	64.5	76.9	11.1
Voronezh Oblast	26.0	69.5	64.2	17.3
Amur Oblast	26.5	82.6	81.9	7.2
Nizhny Novgorod Oblast	28.8	80.7	82.2	11.9
Dagestan Republic	39.9	80.8	2.3	97.7
Tuva Republic	59.5	95.2	81.5	3.3

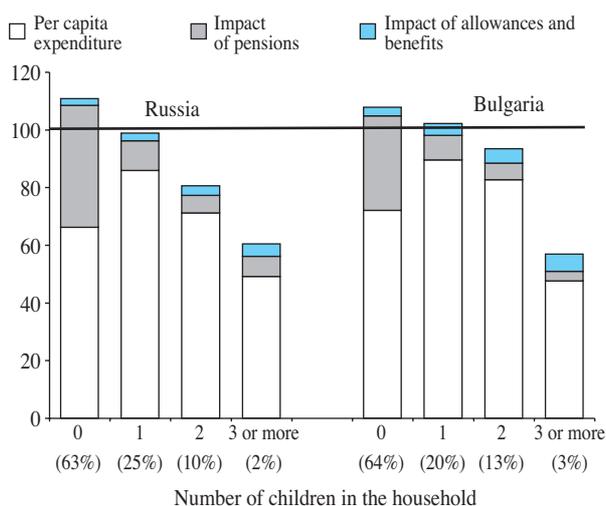
Source: Russia NOBUS Survey 2003.

of benefits are equal to more than 7 per cent of consumption expenditure in Russia and over 11 per cent in Bulgaria (figure 4.7).

While targeting is important in order to ensure that the resources available for child benefits are used most efficiently, it alone will not help to alleviate poverty among households with children if the size of the benefit remains too low to make any significant impact on household living standards. Table 4.11 shows that in the five countries for which microdata are available, family benefits have a very limited effect on child poverty rates and on the poverty gap (the severity of child poverty, or how far below the poverty line, on average, poor children are situated). The exception is for the poverty gap measurement in Bulgaria – that is,

However, the average per capita value of benefits tends to grow with the number of children in the household, and the impact on total per capita consumption is even more important for families with three children or more: in these families, the amount

**Figure 4.7 Impact of public transfers (pensions and benefits) on average household consumption expenditure by number of children in the household, Bulgaria and Russia (average national consumption expenditure = 100)**



The level of per capita consumption for each category is represented by the total bar. The figures in brackets refer to the relative share of the given type of household as a percentage of the total number of households.

Source: Bulgarian Integrated Household Survey 2001; Russia NOBUS Survey 2003.

**Table 4.11 Impact of family benefits on child poverty levels and poverty gaps (four countries)**

	Child poverty rate (poverty line \$2.15)		Average poverty gap (per cent \$2.15 threshold)	
	Before family benefits	After family benefits	Before family benefits	After family benefits
Albania (2002)	28.4	26.8	24.8	22.3
Bulgaria (2001)	14.7	12.8	40.4	30.6
Moldova (2003)	56.7	55.6	35.0	33.3
Russia (2003)	17.8	16.7	32.8	27.6

Source: Authors' calculations based on Albanian Living Standards Measurement Survey 2002, Bulgarian Integrated Household Survey 2001, Moldovan Household Budget Survey 2003, Russian NOBUS Survey 2003 and Tajikistan Living Standards Survey 2003.

receipt of child benefits did seem to reduce the severity of child poverty in 2001. However, because of the change in the family benefit system, the results for Bulgaria cannot be extrapolated to the successive years. Overall benefits are just too low to have an impact on child well-being.

**To summarize:** In general it is seen that targeting is working in the five countries studied, but needs to be improved, since many of the poorest children are not receiving child benefits; and that cash transfers can have a particularly positive impact for those households with characteristics shown by previous chapters to be particularly associated with child poverty and deprivation, namely rural residence and large households. However, the low levels of benefits mean that, even with efficient targeting, their impact on the alleviation of poverty is very small. Targeting has to be

accompanied by increased spending to raise the value of benefits.

### 4.3 Benefits to very young children (maternity benefits and leave)

This section looks at a policy intervention which is specifically directed at infants.<sup>18</sup> Maternity benefits have a dual role to play in promoting child well-being and development in the first few months of life. First, along with birth grants, they are crucial in protecting household income at a very vulnerable time. In their absence, families where a mother has stopped paid work to have the child are likely to experience a substantial drop in income just as demands on the household budget rise.

At the same time, paid maternity leave enables and encourages mothers to spend time at home both immediately before and in the first few months after birth, and this has been shown to have a significant impact on child development. Throughout the first year there is also a health impact: recent studies of OECD countries have found that increases in the length of paid maternity leave are associated with falls in the rate of infant mortality.<sup>19</sup> In part this is because paid maternity leave appears to reduce low birth weight (perhaps because it allows a mother to stop working some weeks before the birth); and in part it is likely to be related to higher breastfeeding rates. Both transmission mechanisms point to long-term implications for morbidity as well. Berger et al. (2005) find a correlation between early return to work and a decline in immunization and breastfeeding.

Table 4.12 shows the provision made for maternity benefit in the countries of the region. On paper, the situation looks fairly impressive, with all countries offering a period of paid maternity leave comparable in length to average OECD levels, often at high rates of compensation. In Bulgaria, Romania and the CIS countries, working mothers are in general entitled to around four months paid leave, though throughout the CIS at least half of this must be taken before the baby's birth. In most cases, leave is paid in full at the level of the mother's previous monthly salary, though in Belarus minimum and maximum restrictions apply. Exceptions include Romania, where mothers were paid 85 per cent of their monthly earnings over the previous six months until a recent change to 85 per cent of the gross average salary used in setting up the state national insurance budget, benefiting those in lower paid jobs.<sup>20</sup> In Uzbekistan, the Mahallas (local citizens' self-governing bodies) have been responsible for allocating maternity benefit on the basis of perceived need since 1999.<sup>21</sup>

In South-Eastern Europe, formal provision is more generous, with the period of paid leave ranging from

six months in Croatia to a full year in Albania and Serbia and Montenegro; in Croatia women can also take additional leave until the child is a year old or three years old for twins and third and subsequent children, though at a lower rate of compensation. In the FYR Macedonia nine months is available, plus another three for multiple births. In Albania leave is paid at 80 per cent of earnings for the first six months and at 50 per cent thereafter; in the other parts of this subregion 100 per cent of earnings is replaced, though in some cases with minimum and maximum restrictions. If anything, changes have in general made the systems more generous by increasing the number of days of paid leave, in an attempt to cushion some of the impact of reforms and perhaps to compensate for the closure of many preschools and nurseries as enterprises faced economic crisis. In many countries (such as Croatia) more generous leave is also part of an openly pro-natalist drive, aimed at reversing the decline in the birth rate. The only country in which maternity rights have tightened is Armenia, where budgetary constraints have led the government to reduce the number of days to 112, after an increase from 122 to 140 at the start of the 1990s.

However, maternity benefit is not a statutory right available to all new mothers. Almost across the board, it forms part of a social insurance package which accompanies formal employment. The self-employed and some agricultural workers are also covered, usually providing they have made insurance payments for a minimum qualifying period. Coverage is also extended in most cases to the registered unemployed, with the monthly benefit set at the level of the minimum wage. But those engaged in informal employment are not entitled to paid leave; nor are those without work who have left the labour market altogether and are not registered as unemployed. Only Bulgaria stands out as rather different, with maternity benefit available on a social assistance as well as a social insurance basis.

These limits on eligibility are of particular importance for this part of the world. The transition has seen large increases in informal employment and women appear to have been disproportionately affected by these changes in the employment situation. In Russia, for example, women lost 7 million formal sector jobs between 1990 and 1995, while men lost 1–2 million.<sup>22</sup> Evidence from Central Asia also suggests that a greater proportion of female than male employees have been laid off, and that more women than men are on unpaid leave.<sup>23</sup> In addition, women appear to face greater difficulty in re-entering employment, partly because the costs of maternity rights discourage employers.<sup>24</sup> It is no surprise then that, while formal rights remain strong, this does not always translate into positive reality, and the level of take-up of paid maternity leave in practice has fallen sharply across much of the region.

**Table 4.12 Formal rights to paid maternity leave, 2003**

	Duration	Value	Eligibility	Changes since 1989
Bulgaria	135 days (45 to be taken before the birth and 90 afterwards)	90% of the daily insurance basis	Six months of insurance coverage	
Romania	126 days	85% wage in last six months	Linked to employment; need six months of contributions to social security scheme immediately prior to childbirth	2000: share of base salary extended to 85% for all. 2004: value to change to 85% average salary (benefiting those on lower incomes)
Albania	365 days (35 + 330) plus 25 extra days for multiple births	80% salary over last year for 150 days; then 50%	Employment for more than one year	1994: duration of second part of leave increased from six months
Croatia	Six months, plus additional leave until the child is one (or three for twins and third and subsequent children)	100% salary (with minimum and maximum restrictions; the maximum is lower for additional leave, and a fixed rate is paid after child is one)	Linked to employment	1996: leave extended to three years for twins and third and subsequent children, including for unemployed mothers
FYR Macedonia	Nine months plus three extra months for multiple births	100% average wage	Conditional on health insurance	
Serbia and Montenegro	365 days	100% earnings (up to maximum five times average wage)	Linked to employment	Current law 1992
Belarus	126 days (70 + 56) plus 14 extra for multiple births/complications	100% earnings (with minimum and maximum restrictions)	Linked to employment	1991: period before birth raised from 56 to 70 days
Moldova	126 days plus 14 extra for multiple births/complications	100% earnings in last two months	Linked to employment	

The take-up and impact of maternity benefits are difficult to monitor, because of the particular nature of the benefit: survey samples capture only a small number of mothers on maternity leave, which only lasts for some months. However, the limited sample of such mothers for Albania and Tajikistan suggests that just 1.4 per cent and 0.35 per cent of households with children under two years were receiving any income from maternity benefit in 2002–2003. In contrast, in Bulgaria, where receipt is not limited to those who are employed, 47 per cent of households with children under two were in receipt of maternity benefits.

#### 4.4 Conclusions

Most countries in the region inherited quite developed systems of social transfers, which were primarily geared towards the provision of pensions for the elderly. These systems have continued to operate in the transition period, and the orientation towards pensions has remained, if not increased. Overall spending on

social security as a share of GDP is high in some countries of the region, but low or declining in others, especially those with more child poverty and large child populations. In all the countries, the share of expenditure allocated specifically for child benefits is relatively small. This is not entirely explained by a shrinking child population, since there is evidence that for some countries per capita spending on children has also decreased relative to per capita spending on the elderly. Many households with children do benefit from pensions, but not in a systematic way, and the benefits do not necessarily accrue to the poorest households with children.

The fact that children gain most material assistance as a by-product of pension payments suggests a lack of priority given to them, which may or may not be intended. In countries facing a demographic crisis, characterized by an ever decreasing child population, the current situation of public material support to families provides the wrong signals to couples who would like to have children (or more children).

**Table 4.12 continued**

	Duration	Value	Eligibility	Changes since 1989
Russia	140 days (70 + 70) plus 16 extra days for multiples	100% earnings	Linked to employment	1992: duration up from 112 to 140 days. 1993: extended to women laid off during pregnancy. 1995: extended to full-time students. 1997: extended to 156 days for multiple births
Ukraine	126 days (70 + 56)	100% earnings	Linked to employment	1991: duration up from 112 to 126 days and from 50% to 100% of wage
Armenia	140 days (70 + 70); up to 155 days if there are complications from childbirth; up to 180 days for multiple births	100% average earnings in the last three months	Linked to employment	1991: duration up from 122 to 140 days. 2004: to be reduced to 112 days
Azerbaijan	126 days plus 14 if in agriculture, plus 14 for multiple births/complications; or 16/40 if in agriculture	100% earnings	Linked to employment	Current law 1997/1999
Georgia	126 days (70 + 56)	100% earnings	Linked to employment	
Kazakhstan	126 days plus 14 for multiple births/complications	100% earnings	Linked to employment	
Kyrgyzstan	126 days (70 + 56) plus 14 for multiple births/complications	100% earnings	Linked to employment	
Tajikistan	140 days (70 + 70) plus 14 for multiples and 40 for complications	100% earnings	Linked to employment	
Turkmenistan	112 days (56 + 56) plus 16 for multiples and 40 for complications	100% earnings	Linked to employment	Current law 1998
Uzbekistan	Responsibility for maternity benefit allocation in the hands of citizens' self-government bodies (the Mahalla); allocated on basis of perceived need			1999: shift away from traditional employment-based system

Source: Stewart and Huerta (2006).

Appropriate surveys would allow policymakers and analysts to track the impact of benefits, and so make adjustments in budgets and improvements in the targeting and administration of benefits. Household budget surveys do not always specify the type of social benefit received by families when household income from all types of social transfers is recorded; while in other countries, when the survey does contain a module to allow detailed monitoring of receipt of benefits and the extent of exclusion of the poor, the data are not used by the government for this purpose.<sup>25</sup>

There are other challenges to be met in restructuring the administration of social security, and in particular in choosing, designing and introducing mechanisms to target child benefits on the poor. There is a need to con-

tinue reforms which lead to a clearer separation between the financing and purposes of the two types of social protection: child benefits and pensions. Pensions should be more clearly linked to individual contributions, and represent risk management and a smoothing of income rather than a form of social assistance for the elderly and, indirectly, their families. Pension schemes with individual records monitoring size and number of years of contributions, as well as voluntary supplementary pensions, are now being introduced. Social pensions or social assistance will still be required for those among the elderly who have not been employed long enough in the formal sector to qualify for pensions based on social insurance.

Reform of child benefits is part of the package of

reform of social protection: the outcome should be a clearer and more transparent commitment by governments to provide meaningful material support to families with children. The level of child benefits depends greatly on the fiscal resources available, and this will influence the choice and design of the most effective mechanism for establishing eligibility. The main choice is whether to use restricted resources to provide child benefits on a universal, a categorial, or a targeted basis, and the choice for each country will depend to a large extent on the dimensions of the population of children. Those with greater shares of children in the total population face large expenditure levels, particularly if child benefits are provided on a universal basis. In most countries, experiments with more restrictive targeting have begun, but the task of managing a workable means-testing mechanism is not an easy one, especially when informal earnings are widespread. In some countries, there is evidence that those who are entitled to benefits do not actually receive them, because of short-

falls in local budgets or problems with administrative mechanisms. There is a trade-off throughout the region between coverage and size of benefit: too low and they do little to help protect children from poverty.

Targeting benefits is highly information intensive. One clear point relevant to this region is the need to find a means test which takes income from all sources into account, including both formal income from wages and transfers and informal income from second jobs, activity in the grey economy and agricultural self-employment. The Russian income test appears to be poor at achieving this, while the Albanian system of taking account of a household's ability to raise its own private income seems on the basis of the evidence above to work fairly well. More generally, proxy means tests could provide a solution. These involve the construction of a score based on observable household characteristics which are simple to report and hard to manipulate, including housing quality, household composition, and the education and working status of household members. Experiments in such means-testing mechanisms have been conducted in Azerbaijan and Ukraine.

# 5 ADDRESSING CHILD POVERTY IN SEE/CIS: POLICY RECOMMENDATIONS

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This study sets out to understand better the nature and scale of child poverty as distinct from adult poverty in the region, in terms of both income and other key areas of deprivation. Its purpose is first to make the case to governments and their partners that a child-centred analysis – looking at the child as an individual with evolving needs and capacities, and also as a member of a household and community – is necessary for policy purposes; and secondly, to promote urgent, sustained and mutually reinforcing policy responses aimed at achieving equity and non-discrimination, reducing disparities among children, improving children’s universal access to public services of quality and securing an adequate standard of living for all children.

As was discussed in chapter 1, the approach is not without methodological challenges, placing new demands on information collection and analysis. But in facing up to these challenges it is possible to obtain a more nuanced picture of the children living in poverty, who and where they are, and what kinds of deprivation they face. This in turn enables public expenditure to be better targeted on children to achieve equity and a reduction in disparities in their access to public services. Of course, this is only possible within a framework of sustained and broad-based economic growth and adequate levels of public expenditure, which are crucial in the fight against poverty.

Issues of availability and access to survey microdata at the household level, and the limited amount of information relevant for the analysis of child income poverty in such surveys, have meant that the analysis

is not so much comprehensive as illustrative of what could be done in individual countries. Furthermore, SEE/CIS is an increasingly heterogeneous region, so that it is inevitable that, while some common trends emerge, policy recommendations have to stay at a certain level of generality in a report of this nature to be adjusted to the specific reality of each country.

After the next section on the links between child rights and poverty, the following two sections distil lessons from the analysis into recommendation to governments in the region to develop a national consensus to reduce children’s poverty and to collect strategic information to monitor progress and assess the impact of policy on child poverty. The final sections then review key findings and recommendations to complement those discussed in the individual chapters.

## 5.1 Fulfilling child rights in the region means tackling poverty and reducing disparities

As signatories to the Convention on the Rights of the Child, governments of the region have a duty to fulfil children’s rights, including children’s adequate standard of living. Although the situation across countries differs widely in terms of the availability of resources, each could be doing more. Apart from their responsibility to address the effects of deprivation on children in the present, and promote equity for children, all countries also need to understand the urgency of investing in children as the future generation. As argued in Chapter 1,

children experience poverty now, but they are also 'evolving' into adults, and the poverty which confronts them in today's world compromises their well-being and development and increases their likelihood of being poor as adults; poverty compromises the realization of child rights.

The turbulence of the initial transition period has passed, and since 1998 the region has experienced economic recovery and growth. The poverty levels that emerged in the early transition years have begun to recede, although not all countries have regained the GDP per capita levels of 1989. There are some doubts about the sustainability of the growth trend in many of them, and it is the poorest countries whose recovery path is the slowest and most uneven.

An estimated 18 million children under the age of 15 live on less than PPP \$2.15 per day in the region. The analysis has shown that the income poverty situation of children has improved since 1998, but often by less than for the population at large. Extreme child income poverty is increasingly concentrated in certain groups – children in rural or particularly disadvantaged areas, children with many siblings, children living in non-nuclear families, and, in some countries, belonging to certain ethnic groups. These concentrations of poverty are particularly evident in SEE and Western CIS, where overall child income poverty is relatively low, while child poverty is more widespread in countries in the poorer subregions. Disparities are widening in child well-being across countries, between regions within countries, and between children from different types of families. This reflects the widening disparities in access to economic opportunities and to a wide range of social and other essential services, and inadequate support for households with young children. The mixed trends in well-being indicators during a period of economic growth are signs that governments in the region have not explicitly prioritized policies aimed at the fulfilment of the rights of the child, including that to an adequate standard of living.

On the whole, this study has used very restrictive measures of poverty and deprivation, and points therefore to extreme forms of child poverty. It should not be forgotten that there also remain broad sections of the child population who may not be extremely poor, but are still highly vulnerable.

## 5.2 Adopting 'good practice principles' for defining and measuring child poverty

There are many different ways of defining and measuring poverty which have been applied at different times to countries with different characteristics. The definition of poverty will always be related to the specific time and place where it is being measured. Chapter 2 has outlined some of the choices to be made

when measuring child income poverty in the region (welfare aggregate, use of equivalence scale, poverty line). These choices are technical, as well as political, and consensus has to be established on these and other non-income definitions before child poverty can be consistently measured and monitored.

The following principles – adapted from those proposed for OECD countries in UNICEF (2005a) – are presented as an initial proposal for good practice principles for monitoring poverty among children in the SEE/CIS region:

- 1 *Establish an absolute poverty line through broad consultation.* In the countries of the SEE/CIS region, where children's basic needs are not always met, child income poverty should be measured using an absolute poverty line. For this a national subsistence minimum for children has to be devised and officially agreed on. A balance is required between simplicity and consensus: the approach in Russia is quite complex but it follows a methodology which was used during the Soviet period. Familiarity with the methodology may make broad consensus easier to obtain.
- 2 *Measure non-income deprivation among children along a series of dimensions.* Outcome indicators measured at the level of the individual child should be monitored, and disaggregated to subnational territorial units, as well as indicators of equitable access to quality basic social services. While complexity should be avoided, a list – manageable rather than exhaustive – of such indicators should be established (representing children at different ages), and data collection and analysis for the indicators assured.
- 3 *Complement the absolute approach in measuring income poverty with a relative one.* While, as argued in (1), child income poverty in the SEE/CIS region should be measured using an absolute poverty line, the use of a relative poverty line – expressed as a proportion of median consumption expenditure – can serve as a complementary measure for estimating the share of children whose access to economic resources falls so far below the average for their societies that it poses a risk of social exclusion for the children concerned.
- 4 *Establish a regular monitoring system.* Progress needs to be tracked regularly over time to inform and adjust policy, sharpen accountability and fuel advocacy. Investment has to be made in data collection through administrative systems and regular household survey instruments, and in systems of child-centred analysis which are designed in such a way that they are sustainable over time.
- 5 *Set targets.* With child poverty distinct from adult poverty, separate and ambitious goals should also

be set specifically for the reduction of child poverty. Experience from the United Kingdom (discussed in UNICEF 2005a) suggests that setting clear goals for the reduction of child poverty gives children national visibility and galvanizes action. Most of the countries in the region are formulating national Millennium Development Goals, Poverty Reduction Strategy Papers or action plans to combat poverty as part of the European Union accession process. Poor children, not just included as recipients of social services, need greater visibility in these documents, with measurable goals, priority policy measures and resource commitments.

As testified by these ‘good practice principles’ and the analysis throughout the report, the assessment of poverty among children cannot be reduced to the study of any single indicator: optimizing policy analysis and responses – and mobilizing continued public support – require a systematic approach to the collection, analysis and publication of information on child poverty and deprivation along a range of dimensions.

### 5.3 Assessing the manifestations and extent of child poverty

Information on the situation of children – be it in relation to the financial and other resources available at the household level, to health, education and housing, or to their access to and the quality of public social services available to them – is often not readily obtainable. The information may not be regularly collected, it may be of uncertain quality, or access to it may be restricted. Data limitations may mean that not all indicators can be given due weight, so that the links between them cannot be analysed satisfactorily.

Much can be done to strengthen the regularity, timeliness and flow of administrative information on resource availability, uptake of services and output. Better use can also be made of regular household budget surveys, and of one-off surveys. This report has shown how microdata can be used for analysing the multidimensional nature of child poverty. Household surveys could become more useful through, for example, the inclusion of questions asking for information on school attendance, children’s use of time, household members’ migration, and so on. For this, there is a need to create demand for such analyses. Policymakers need to understand how survey data, especially multi-topic surveys, can be used for evaluating the impact on children of existing and proposed policy measures.

Broadening the policy debate on child poverty requires a corresponding broadening of access to information. This study has suffered from the fact that access to microdata was possible for just 5 out of the 19 countries in the region. Poverty remains a politically sensitive issue, but lack of access to data hinders

the monitoring of the factors associated with child poverty by both domestic and external analysts, and ultimately affects the quality of the debate and the policy recommendations provided. Comparisons of the situation of children with others in their own country, or international comparisons, are sometimes difficult. Yet international comparison is important in learning lessons and understanding ‘good practice’.

Examples of survey and administrative instruments which are of significance for assessing child well-being include regular assessments of child nutrition. These could track the adequacy of household income levels to meet the consumption needs of children, with a special focus on the intrahousehold distribution of resources in relation to children, and follow the levels of uptake of child health services. Apart from health surveys, some of this monitoring could be done through reintroducing regular medical checks in schools. Improving the timeliness and flow of information on school attendance would help to detect inequalities in access, especially to upper secondary levels. Standardized learning achievement surveys at all levels of compulsory schooling are required in order to understand better the extent of inequalities in quality of school education. Overall, there is a need for more assessment of the quality of, rather than simply access to, compulsory education. Monitoring housing conditions and access to basic utilities (in particular to safe water in the dwelling and to clean fuels for heating) is a prerequisite for policies aimed at reducing housing deprivation.

The situation of children deprived of parental upbringing deserves special attention. Children in institutions and street children are by definition not captured in household surveys, and separate and specific survey tools are required to understand their reality and inform policies to address their problems.

Although governments need to do better in collecting and using information on indicators of child well-being, the analysis in this report confidently points to a number of groups of disadvantaged children and areas in relation to which governments cannot claim ignorance as an excuse for inaction.

### 5.4 Making economic growth more broad-based

Often inequalities are linked to the type and the composition of economic growth. In some countries growth is driven by high prices of energy commodities for export, i.e. growth is sustained by sectors which tend to be capital intensive rather than labour intensive. This brings a risk that growth has only a minimal impact on underemployment or unemployment, and without specific redistributive policy interventions, it could lead to an increase in inequalities. The clear disadvantage

faced by children in rural areas and small towns speaks to the need for further reform of the agricultural sector, coupled with better incentives for investment and small-scale private sector development to improve opportunities for income generation in these areas. Broad-based growth and the creation of job opportunities are also needed to stem the increasing migration of labour from countries such as Moldova and Tajikistan. Remittances can spur on economic growth in the short run, but they will not on their own support sustainable and equitable development. Economic activities need to be strengthened beyond a few sectors of the economic revival to become more inclusive of women and young people. This would also help to broaden the tax base across regions within countries and enable local governments to meet their obligations in an equitable manner, complementing efforts by central government to invest in the health, education and social protection of children.

### **5.5 Directing public funds in support of groups and areas facing deprivation**

The study has identified two main areas for policy intervention aimed at increasing investment in children. The first involves the provision of more generous and better targeted child benefits and an increase in the material support provided to families with children. The data reported in chapter 2 show clearly that, for many families, having children implies a reduction in household welfare and increases the risk of income poverty. In rural areas there is often a lack of the cash necessary to pay for school materials, children's clothes, and health visits. Chapter 3 has noted that households have to make up for cutbacks in public expenditure on health and education through formal and informal payments. Chapter 4 has shown that the amount of material assistance available to families is small, and on the whole has a small effect in alleviating poverty, yet it can still be highly significant, especially for families in cash-strapped rural areas. In the SEE and Western CIS, policymakers wishing to reverse trends in fertility rates should be sending clearer messages to couples through the provision of incentives and material support to young couples with children.

Chapter 4 has shown that families with children do benefit from state transfers, but mostly in an indirect way, for example, through the receipt of pensions by adults. Because these are not intended for children, their contribution to addressing disadvantage among children is at best a by-product of their main function of providing support for the elderly. The policy purpose of child benefits should be explicitly stated, and benefits paid directly to families with children. This requires further reform efforts to achieve a clear separation between social assistance and social insurance benefits, coupled with the introduction of viable social

insurance pension schemes. In most countries the size of child benefits should also be raised, so that they have a genuine poverty alleviation effect. Targeting should be improved where possible, although it is recognized that this is not a simple task; different solutions for administering and controlling targeting (means testing) have been adopted across the region, with various degrees of effectiveness and success.

The region, in particular the Western CIS countries, Bulgaria and Romania, is reporting high numbers of children in institutional care. Poverty at the household level is one of the leading reasons for the placement of children in institutions. Institutionalization can have permanently damaging effects on child development, reproducing and reinforcing the vicious circle of poverty and exclusion for vulnerable children. Policies in support of households to help prevent abandonment and institutionalization are necessary, both in the form of financial assistance and in the form of support through social workers. Child benefits can play an important role in these policies, along with a reinforcement, re-organization and integration of the social services network and the promotion of relevant reforms.

Apart from child benefits, maternal benefits paid specifically to mothers with infants (0–1 years) can provide support to families at a time when the mother has to withdraw from the labour force in order to care for her newborn infant. Chapter 2 points out the particular vulnerability of very young children to income poverty. Chapter 4 has shown that maternal benefits are paid in most countries in the region, but are usually linked to formal employment, so that they are not received by large numbers of mothers who are either not employed, or employed in the informal sector. Benefits aimed at supporting mothers with young children should be universal.

The second type of investment required for children is a conscious investment in the human capital of this shrinking age cohort. Chapter 1 emphasizes the particular dependency of children on public social services. Chapter 3 has shown that public expenditure on health and education in most countries has not risen in line with growth in GDP. It is low in many countries of the region, especially in the countries of Central Asia and the Caucasus, and Albania, but also even in those with fast-growing economies. Reforms of health and education delivery systems and methods of budget allocation have still to be completed. The ways in which budget funds for health and education are allocated also have to be more closely monitored, in order to understand how they are reinforcing or counteracting existing inequalities among children in access to and quality of public services.

Chapter 3 also points to areas of public services affecting the well-being of children beyond health and education. These include the housing conditions

of children in families who are unable to take advantage of the new environment to construct their own housing, or renovate formally privatized state housing, or of households living in those rural regions that are chronically underserved by the utilities infrastructure. Governments need to create and support incentives to upgrade housing for poor households, including for young couples wanting to raise families and households facing severe overcrowding.

It was noted above that inequalities in access to health and education services have also arisen because of the rise in formal and informal payments for these public services. With regard to informal payments, political will is needed to tackle governance issues, and the removal of all ambiguity between services for which fees are required and those which are free. With regard to formal payments, more transparent regulation of payments for public services is required, together with mechanisms for guaranteeing a basic package of health-care services for all, and for ensuring exemptions from fees for low income households.

Decentralization of responsibility for the financing and delivery of social services is not always being carried out in a way which acts to equalize opportunities for children in different regions within countries: on the contrary, it may have taken pressure off central budgets and administration, and allowed local governments to be more flexible in the use of local resources, but at the expense of growing disparities in access, quality, and opportunities for children in different regions. In some cases, local governments still have little incentive to make more efficient use of funds, because any rationalization in the use of existing funds means that the savings are 'siphoned off' by the centre.

Assigning more responsibility for the provision of education and health services, as well as infrastructure, to local governments must go hand in hand with measures to set performance standards and to ensure adequate funding to meet local needs, including allocations from the central level in areas where the local tax base is weak and children face particular disadvantages.

## **5.6 Better investment in families and children is an investment in a better future for all in the region**

Countries in the region have always had different socio-economic and cultural characteristics which pre-date the socialist era, and which the years of central planning had narrowed to a certain degree. In the early 1990s the inheritance of this levelling effect was still tangible, but since then the countries have grown very diverse. Two main factors have contributed to this divergence: the economy, in particular different structures, levels of GDP and rates of economic growth, as discussed earlier; and demography, in particular, different population structures and patterns of demographic change.

In SEE and Western CIS, with some exceptions, income poverty is concentrated in only a few groups of the child population, but at the same time a demographic crisis has emerged.<sup>1</sup> In most of the countries, fertility rates have been falling since before the transition period, but the economic uncertainties of the post 1991 period have led to more dramatic declines. The long-term effect of these falls in birth rates, namely a rapidly ageing population, could have negative impacts on economic growth and on the functioning of the social protection system. It is therefore in the interests of these countries to spend more on children and families as an important part of their investment in future economic development. Investment in better education and health services for children strengthens families and will in the long term mean that the younger cohorts within the workforce in these countries are better equipped to contribute to the economy and to promote social progress, in a probable context of increasing dependency ratios. For the countries of these subregions, the analysis in chapter 2 has shown that having a second or third child increases the risk of a household being poor. Apart from the social policy task of helping lift such households out of poverty, these countries need to provide more support to families, and in particular young families, to reverse the current fertility trends.

In the Caucasus countries, high child poverty rates are coupled with quite low levels of fertility (in all the countries, the total fertility rate is lower than the generation replacement level), while in Central Asia, where child poverty rates are the highest in the whole region, there has also been a reduction in fertility rates, but from higher starting levels, and at a slower pace. Thus there is no demographic crisis – at least in Central Asia – but in this group of countries the levels of child income poverty and the prevalence of other forms of deprivation are extremely high, with for example more than half of the child population living in income poverty, high infant mortality rates, and widespread evidence of malnutrition and micronutrient deficiencies. In these countries, the urgency of directing more domestic and development resources to investment in children is driven quite simply by the need to meet their basic rights to survival and development and to break the intergenerational transmission of poverty.

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Action aimed at reducing child poverty, disadvantage and disparities are fundamental for advancing child rights in the region; they are also an investment towards meeting the development challenges ahead – healthy, knowledge-based competitive societies with manageable dependency burdens, where every child can grow up to become all she or he can be. Addressing

child poverty in this wide region demands a direction of public resources towards equitable access to social services of good quality for children in all age groups, and a strengthening of household income through macroeconomic and sector policies and through social protection mechanisms. It should include direct

income support to families with children, particularly young children and children with disabilities. For many countries, more generous support from the international community is also needed to accelerate progress in the reduction of child poverty.

## NOTES

### Executive Summary

- 1 From the 9 countries which previously constituted the former Soviet Union and Eastern Europe, 28 countries emerged. This study covers 20 of these countries. It does not cover the 8 countries of Central Europe and the Balkans which joined the European Union in 2004. In the final stages of the study (Spring 2006), Montenegro became an independent State. However the statistical analyses and tables in this report all refer to the pre-2006 period, with Serbia and Montenegro still constituting one State.
- 2 It should be noted that income poverty is used here to refer to deprivation of material resources, but it is in fact per capita household consumption expenditure expressed in money terms – rather than per capita income – which is the indicator used to rank households as being above or below the various poverty lines discussed below. This follows the example set by previous studies of material poverty in the region (see, for example, World Bank 2005a), which have found that data on income tend to be underreported, and that consumption expenditure tends to be a more reliable indicator of the material resources available to households.
- 3 The poverty line of PPP \$2.15 per day is used by the World Bank for analysing poverty in the region. This threshold is also close to some of the lowest national poverty lines adopted by countries in SEE/CIS, and corresponds in the region to about the average minimum expenditure required to cover the cost of a very meagre food basket, plus a minimum allowance for heating, lighting and essential non-food products (World Bank 2005a).
- 4 Because of data limitations, the estimates for the number of children living in income poverty refer to the child population aged 0–15; demographic figures on the decreasing child population also refer to the 0–15 age group.
- 5 8 The countries with World Bank/International Monetary Fund sponsored Poverty Reduction Strategies are Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Kyrgyzstan, Moldova, Serbia and Montenegro, Tajikistan, and Uzbekistan. In addition, FYR Macedonia produced a Poverty Reduction Strategy without the support and input of the International Financial Institutions.
- 6 9 Data on current PPP\$ GDP per capita for all the countries of the region are reported in the Statistical Annex, table 7.1. The definition of PPP\$ is reported in the glossary.
- 7 10 See for example UNICEF (2001).
- 8 11 Kanbur and Squire (2001).
- 9 12 Gordon et al. (2003).
- 10 13 See, for example, Townsend (1979); Nolan and Whelan (1996).
- 11 14 These are elaborated in more detail in Menchini and Redmond (2006).
- 12 15 Mehrotra and Delamonica (2002).
- 13 16 Bradbury and Jäntti (1999), p. 12.
- 14 17 United Nations (1995).
- 15 18 Gordon et al. (2003), p. 8.
- 16 19 Demographic and Health Surveys have been funded by the United States Agency for International Development (USAID) in developing countries for many years. They use standardized key questions and methodology to collect information related in particular to maternal and family health.
- 17 20 See Nolan and Whelan (1996).
- 18 21 For a summary description of the household surveys analysed in this report, see Technical Notes and Glossary on p. 124.
- 19 22 UNICEF (2002a), p. 395.
- 20 23 UNICEF (1993, 2001 and 2002b).
- 21 24 For example, Cornia (1994), Falkingham (1999), Gantcheva and Kolev (2001).
- 22 25 The microdata used are from household budget surveys and living standards surveys (for a summary description of the household surveys analysed in the report, see Technical Notes and Glossary on p. 124). While they contain a wealth of information that this report exploits, it is important to recognize that they also have weaknesses. Restricted sample sizes mean that in most cases it is not possible to analyse in detail the circumstances of very small minority groups of children. Moreover, these data give a snapshot of a child's situation at one point in time, and from this it is difficult to deduce the child's progress over time. Such data are accessible for very few countries in the region. In addition, not all of the indicators listed on table 1.1 come from the same survey source. Thus data on nutrition come mostly from surveys that contain no or little information on household income or consumption, and data on educational achievement among children contain little information on children's social and family background. And for some indicators, microdata analysis is not possible, the clearest example on table 1.1 being infant mortality, which is a relatively rare event in most

### Chapter 1

- 1 When research for this study began, there were 22 new states. In the final stages of the study, Montenegro became an independent state (Spring 2006), and the number of new states has therefore risen to 23. However the statistical analyses and tables in this report all refer to the pre-2006 period, with Serbia and Montenegro still constituting one state.
- 2 The eight countries in Central Europe and the Baltic States which joined the European Union in 2004 are not analysed in this report.
- 3 Alston (2005).
- 4 Article 27, Convention on the Rights of the Child.
- 5 United Nations (2000), para. 11.
- 6 Article 4, Convention on the Rights of the Child.
- 7 In fact, the countries have worked on an 'MDG plus' formula for MDG 2, since universal primary education has long been a reality in the region, but enrolment rates in compulsory and non-compulsory levels of schooling have been slipping in the transition period. No information is provided for Turkmenistan in the World Bank (2005b) report.

countries of the region, and survey samples are not usually large enough to allow reliable estimates. This makes it difficult to draw strong conclusions about the relationship between infant mortality and other indicators or family characteristics, notwithstanding the central importance of mortality in the study of poverty.

26 See Nolan and Whelan (1996).

27 Verdery (1996).

## Chapter 2

1 As explained in chapter 1, income poverty is used here to refer to poverty measured in terms of lack of money at the household level. The indicator used to measure this monetary dimension in this study is actual household consumption expenditure.

2 Montenegro became an independent state in Spring 2006. The analyses in this report refer to the pre-2006 period, with Serbia and Montenegro still constituting one State.

3 Slightly less than 8 per cent of the region's population lives in Uzbekistan, but its 10.5 million children account for about 13 per cent of the region's 0–17 year old population. Russia, with its child population of circa 30 million is home to more than one third of the region's children.

4 See box 2.1.

5 The World Bank (2005a) also uses a poverty line of PPP \$4.30 per day in order to identify members of the population who are not suffering absolute material deprivation, but remain 'vulnerable to poverty'. While in this study we choose to use the measure of extreme poverty, it should be remembered that use of the less restrictive PPP \$4.30 poverty line, as well as the national poverty lines described in this chapter, show the continuing vulnerability of large sections of the child population.

6 These numbers are estimated on the basis of the poverty rates for children aged 0–15 years reported in World Bank (2005a), and the figures on the size of the population aged 0–15 years in the TransMONEE Database. A simple regression model is used to estimate the number of poor children in those countries for which figures on poverty are not available.

7 The impact of public transfers on child poverty, and the role played by pensions and family allowances in lifting households out of poverty are examined in greater detail in chapter 4.

8 World Bank (2005f) reports also that, during the transition, the deterioration of Roma living conditions in Romania has been exacerbated by entrenched patterns of discrimination, prejudice, and incidences of ethnic violence.

9 For this study, employed individuals comprise all persons over 15 years who during the reference period (the week preceding the survey) were either at work or had a job or were with an enterprise but were not at work; persons at work were defined as persons who during the reference period performed work for a wage or salary, or for profit or family gain, in cash or in kind, for at least one hour.

10 The Moldova Household Budget Survey 2003, whose data are analysed in this study, does not report explicitly migration as a cause of long or medium term absence of household members. Migration has been imputed as the reason of absence by crossing different information collected in the survey.

11 See Danziger and Carlson (2001).

12 National Institute of Statistics-Romania (2003).

13 Bulgarian villages compose a large share of the ethnic minority population in Bulgaria. Data from the 2001 census show that 46.2 per cent of Roma and 63 per cent of ethnic Turks live in rural areas. The trends of internal migration tend to concentrate a large share of ethnic minorities in rural villages (UNDP 2004b).

14 World Bank (2006a) reports that only 18 countries in the world experienced a decrease in urban population during the 1990s: seven of them are in the SEE/CIS region (namely, Russia, Kazakhstan, Azerbaijan, Kyrgyzstan, Uzbekistan, Tajikistan and Moldova) and four in Central Europe.

15 See Abele and Frohberg (2003).

16 See Ablezova et al. (2004); Murrugarra and Signoret (2003).

17 For evidence of this in Albania, see Grumiau (2004).

18 ILO and State Statistics Committee of Ukraine (2001).

19 While Roma and Turk people, together, represented 14 per cent of the national population according to the census of 2001, they accounted for 27 per cent of the population of the Bourgass region.

20 However, Falkingham and Ibragimova (2005) comment: "Interestingly, it seems that children living in urban areas have been hardest hit by the recent slowdown in economic growth, with urban child poverty rates worsening between 2001 and 2002 whilst those in rural areas continued to improve." This is also consistent with the World Bank thesis that poverty rates in urban areas are considerably more elastic than those in rural areas.

## Chapter 3

1 The HIV and AIDS epidemic is spreading in the region with a devastating impact on children, young people and families who are already affected. The links to poverty and deprivation and the risk of inadequate action by societies to prevent the spread of the epidemic, provide access to curative services and support the families affected by the epidemic are discussed extensively elsewhere, including in the context of the global campaign 'Unite for Children. Unite against AIDS'. See also UNICEF (2003); UNDP (2006), pp. 17–19, 34–35.

2 World Bank (2000).

3 Cornia (1997).

4 Belli (2001).

5 See UNICEF (2001). On the other hand, during the 1990s several countries of the region experienced a significant increase in adult mortality, especially for males; a trend which was more clearly connected with the pressure arising from the socio-economic turmoil of the early 1990s.

6 Sen (1995), p. 31.

7 For comparison, the eight countries of CEE which joined the European Union in 2004 reported drops in the infant mortality rate of the magnitude of 25 per cent or more between 1998 and 2003.

8 The coefficient of variation (a measure of variability which expresses the ratio of the standard deviation to the average) of infant mortality rates across oblasts increased gradually from 0.21 in 1990 to 0.26 in 2000, and 0.31 in 2003.

- 9 In Bulgaria in 2003, the infant mortality rate was 6.6 per 1,000 live births in Sofia, compared to 30 per 1,000 in Sliven (data from the TransMONEE Database). Two Demographic and Health Surveys (DHS) carried out in 2000 confirm the existence of large subnational disparities in childhood mortality in Central Asia and Caucasus countries: in Turkmenistan, an infant mortality rate of 47.4 was recorded for Ashgabad, compared to 98.6 per 1,000 in Mary; similarly in Armenia, the infant mortality rate reported for the region of Gegharkunik is about twice that of Tavush or Yerevan (see [www.measuredhs.com](http://www.measuredhs.com)).
- 10 Analytical and Information Centre, Ministry of Health of the Republic of Uzbekistan, State Department of Statistics, Ministry of Macroeconomics and Statistics, and ORC Macro (2004).
- 11 See the website [www.measuredhs.com](http://www.measuredhs.com) to obtain infant mortality data by rural and urban residence and other standard indicators from Demographic and Health Surveys.
- 12 UNDP (2002).
- 13 WHA (2001).
- 14 For the definition of stunting, underweight and wasting, see Technical Notes and Glossary on p. 124.
- 15 Andersson et al. (2005).
- 16 Gerasimov (2002).
- 17 Analytical and Information Centre, Ministry of Health of the Republic of Uzbekistan, State Department of Statistics, Ministry of Macroeconomics and Statistics, and ORC Macro (2004).
- 18 The ‘alarm signals’ listed for each country on table 3.6 represent measures of concern about immunization systems, including geographical coverage of vaccine delivery, immunization safety, availability of ancillary equipment necessary for effective vaccination (such as refrigerators), and awareness campaigns on the benefits and availability of vaccinations.
- 19 Rokx et al. (2002).
- 20 World Bank (2005d).
- 21 World Bank (2005e).
- 22 World Bank (2000), p. 264.
- 23 Belli (2003).
- 24 UNDP (2004c).
- 25 World Bank (2005e).
- 26 Bonilla-Chacin et al. (2005).
- 27 Vian et al. (2004).
- 28 World Bank (2005a).
- 29 World Bank (2000).
- 30 Results of microdata analysis from Albanian Living Standards Measurement Survey 2002, Moldova Household Budget Survey 2003, Tajikistan Living Standards Measurement Survey 2003.
- 31 UNESCO (2006).
- 32 Murrugarra and Signoret (2003).
- 33 Data from the TransMONEE Database.
- 34 Eversmann (1999); Asian Development Bank (2005).
- 35 Mullis et al. (2003).
- 36 World Bank (2005d).
- 37 World Bank (2005e).
- 38 World Bank (2005d).
- 39 UNESCO (2006).
- 40 World Bank (2003c).
- 41 World Bank (2003a).
- 42 World Bank (2004).
- 43 World Bank (2005e).
- 44 Dale et al. (1996); Office of the Deputy Prime Minister, United Kingdom (2004).
- 45 World Bank (2006a), p. 51.
- 46 IMF et al. (1991), p. 322.
- 47 UNECE Environment and Human Settlements Division, Housing Database, at [www.unece.org](http://www.unece.org)
- 48 Tsenkova (2005).
- 49 Government of Azerbaijan (2004, 2005).
- 50 The share of households living in the concrete apartment blocks of the central planning period is still very high, particularly in the urban areas. Data for 2000 suggest that the share of housing represented by such apartments is about 30 per cent of all dwellings in South-East Europe, while in Romania they account for 72 per cent of the urban housing stock, with a high proportion in need of repair. See Tsenkova (2005).
- 51 See World Bank (2005a), Statistical Appendix.
- 52 World Bank (2005a).
- 53 WHO Europe (2004).
- 54 There are, however, areas where the water problem is more acute, notably those in the vicinity of the Aral Sea, where lack of access to safe water is a result of the area’s history of mono-crop agriculture, overirrigation and subsequent environmental degradation (see for example Médecins Sans Frontières 2003).
- 55 Von Schirnding et al. (2002).
- 56 World Bank (2005a).
- 57 See, for example, Johnson (2001); Wismer Fries and Pollak (2004); UNICEF (1997, 2001).
- 58 These figures refer to those who were placed in institutions run by the Ministry of Education, i.e. they exclude those under the Ministry of Health (for 0–3 year olds), and those for the disabled. See Goskomstat SSSR (1990), p. 296.
- 59 Sipos (1991), p. 23.
- 60 World Bank (2004).
- 61 Carter (2005).
- 62 Mykytyn (2005).
- 63 Zamfir et al. (2005).
- 64 In Romania the ‘Maternal Assistants’ Network’ has contributed greatly to reducing reliance on institutionalization, and to a growth in the share of use of foster families.
- 65 Mykytyn (2005).
- 66 Bulgarian State Agency for Child Protection (2003).
- 67 UNICEF (2002c; 2002d).
- 68 UNICEF (2001).
- 69 UNICEF (2005b).
- 70 Carter (2005), p. 34.
- 71 Hague Conference on Private International Law (1993).
- 72 Data from the TransMONEE Database. See also UNICEF (2003).

## Chapter 4

- 1 Another method of indirect support to low income families goes via the tax system, either through tax credit to households with children, or more generally through the progressiveness of the income tax system not targeted specifically on households with children, or by excepting certain basic goods and services from value added tax. These instruments, which are not widely used in the region, are not discussed in this report. Furthermore for the SEE/CIS countries, the large size of the informal economy, which escapes direct taxation, means that such policy interventions would have a limited effect. The young and the elderly, and families with children may also benefit from free or subsidized public services other than those discussed in chapter 3, for example public transport. Indirect subsidies through price setting of public utilities may benefit poor households, although such subsidies often provide greater subsidies to other segments of the population who are more heavy users (including of heat or fuel).
- 2 ILO (2005).
- 3 World Bank (2003a).
- 4 World Bank (2003b).
- 5 Government of Bosnia and Herzegovina (2004).
- 6 IMF (2005).
- 7 World Bank (2003d).
- 8 This section draws in part on the work of Stewart and Huerta (2006).
- 9 Braithwaite (1997).
- 10 Klugman and Braithwaite (1998).
- 11 See Coudouel and Marnie (1999); Micklewright and Ismail (2001).
- 12 Government of Montenegro (2004), p. 41.
- 13 Research suggests that this was also the case in the Soviet Union, where Alastair McAuley notes that 'since the procedures for establishing entitlement seem to me to be fairly bureaucratic, I would be surprised if all those

who qualify for a particular benefit in fact receive it' (cited in Atkinson and Micklewright 1992, p. 218).

- 14 State Committee of the Russian Federation on Statistics-Goskomstat of Russia (2003).
- 15 World Bank (2003d).
- 16 Ablezova et al. (2004), p. 12.
- 17 World Bank (2003b), p. 127, states that in 2002 each family eligible for Family Poverty Benefit in Armenia received 4,000 drams monthly, plus 1,500 drams for each child aged under 18 – therefore, 7,000 drams for a family with two children. In 2002, average monthly public sector earnings were about 21,000 drams (TransMONEE Database).
- 18 For more detailed analysis, see Stewart and Huerta (2006).
- 19 Ruhm (2000); Tanaka (2005).
- 20 National Institute of Statistics-Romania (2003).
- 21 Coudouel and Marnie (1999).
- 22 UNICEF (1999).
- 23 Falkingham (2001).
- 24 See, for example, Government of the Republic of Macedonia (2002); Asian Development Bank (2005), pp. 32–33.
- 25 Analysis has been carried out once, not by government, but by the World Bank (see World Bank 2003d).

## Chapter 5

- 1 Demographic problems dominated the Russian Federation President's State of the Nation address, held on 10 May 2006. Vladimir Putin highlighted the demographic crisis as the most serious problem facing Russia and proposed radical measures to deal with it; in particular he stressed the importance of reinforcing the role of child benefits in supporting families, and of paid maternity leave (RIA NOVOSTI press agency, 10 May 2006).

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## STATISTICAL ANNEX

Most of the data in the Statistical Annex have been provided by the central statistical offices of the countries contributing to MONEE. In some cases, additional calculations have been made in order to obtain indicators which are comparable among countries, e.g. educational enrolment rates. The sources of the data in the tables are given in the table notes.

The Statistical Annex can be downloaded free of charge as an Excel workbook from the UNICEF IRC website at [www.unicef.org/irc](http://www.unicef.org/irc). The TransMONEE database includes about 150 indicators concerned with human welfare in the countries of CEE/CIS and the Baltic States.

The Technical Notes and Glossary following the Statistical Annex provides a brief description of the key concepts and indicators, and abbreviations used in the report and in the Annex.

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# 1. Population

## 1.1 Total population (beginning-of-year, in 1,000s)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Czech Republic	10,360	10,362	10,305	10,313	10,326	10,334	10,333	10,321	10,309	10,299	10,290	10,278	10,267	10,206	10,203	10,211	10,221
Hungary	10,589	10,375	10,373	10,374	10,365	10,350	10,337	10,321	10,301	10,280	10,253	10,222	10,200	10,175	10,142	10,117	10,098
Poland	37,885	38,038	38,183	38,309	38,418	38,505	38,581	38,609	38,639	38,660	38,667	38,654	38,254	38,242	38,219	38,191	38,174
Slovakia	5,264	5,288	5,272	5,296	5,314	5,336	5,356	5,368	5,379	5,388	5,393	5,399	5,403	5,379	5,379	5,380	5,385
Slovenia	1,996	1,996	2,000	1,999	1,994	1,989	1,989	1,990	1,987	1,985	1,978	1,988	1,990	1,994	1,995	1,996	1,998
Estonia <sup>b</sup>	1,566	1,571	1,568	1,555	1,511	1,477	1,448	1,425	1,406	1,393	1,379	1,372	1,367	1,361	1,356	1,351	1,348
Latvia	2,666	2,668	2,658	2,643	2,586	2,541	2,501	2,470	2,445	2,421	2,399	2,382	2,364	2,346	2,331	2,319	2,306
Lithuania	3,675	3,694	3,702	3,706	3,694	3,671	3,643	3,615	3,588	3,562	3,536	3,512	3,487	3,476	3,463	3,446	3,425
Bulgaria	8,987	8,767	8,669	8,595	8,485	8,460	8,427	8,385	8,341	8,283	8,230	8,191	8,149	7,891	7,846	7,801	7,761
Romania	23,112	23,211	23,192	22,811	22,779	22,748	22,712	22,656	22,582	22,526	22,489	22,455	22,430	22,392	21,773	21,713	21,659
Albania <sup>c</sup>	3,182	3,287	3,260	3,190	3,167	3,202	3,249	3,283	3,324	3,354	3,373	3,401	3,068	3,084	3,103	3,120	3,136
Bosnia-Herzegovina <sup>a</sup>	-	4,457	4,464	4,353	4,106	3,870	3,747	3,659	3,608	3,712	3,888	3,997	4,073	4,138	4,204	4,294	4,388
Croatia <sup>f</sup>	4,762	4,773	4,781	4,783	4,780	4,778	4,777	4,635	4,533	4,537	4,527	4,467	4,437	4,440	4,442	4,440	4,438
FYR Macedonia <sup>a</sup>	1,873	1,895	1,910	1,921	1,929	1,937	1,957	1,975	1,991	2,002	2,013	2,022	2,031	2,039	2,024	2,030	2,035
Serbia and Montenegro <sup>b</sup>	10,445	10,500	10,558	10,434	10,469	10,503	10,535	10,568	10,594	10,614	10,629	10,637	10,645	10,662	-	-	-
Belarus <sup>g</sup>	10,152	10,189	10,190	10,198	10,235	10,244	10,210	10,177	10,142	10,093	10,045	10,019	9,990	9,951	9,899	9,849	9,800
Moldova <sup>h</sup>	4,335	4,359	4,364	4,357	4,346	4,350	4,346	4,332	4,318	3,651	3,650	3,644	3,635	3,628	3,618	3,607	3,600
Russia	147,022	147,665	148,274	148,515	148,562	148,356	148,460	148,292	148,029	147,802	147,539	146,890	146,304	145,649	144,964	144,168	143,474
Ukraine <sup>e</sup>	51,452	51,584	51,690	51,802	51,989	51,860	51,474	51,079	50,639	50,245	49,851	49,456	49,037	48,241	47,787	47,442	47,100
Armenia <sup>h</sup>	3,449	3,515	3,578	3,649	3,708	3,739	3,753	3,767	3,780	3,790	3,798	3,802	3,802	3,212	3,210	3,213	3,217
Azerbaijan	7,014	7,132	7,219	7,324	7,440	7,550	7,644	7,726	7,800	7,877	7,949	8,016	8,081	8,141	8,203	8,266	8,347
Georgia <sup>h</sup>	5,401	5,424	5,453	5,467	5,346	4,930	4,794	4,675	4,558	4,505	4,470	4,435	4,401	4,372	4,343	4,315	4,289
Kazakhstan <sup>c</sup>	16,194	16,298	16,358	16,452	16,426	16,335	15,957	15,676	15,481	15,188	14,955	14,902	14,866	14,851	14,867	14,951	15,075
Kyrgyzstan	4,254	4,358	4,425	4,502	4,528	4,505	4,525	4,596	4,661	4,732	4,806	4,867	4,908	4,946	4,984	5,037	5,093
Tajikistan	5,094	5,244	5,361	5,506	5,567	5,580	5,634	5,701	5,769	5,876	6,001	6,127	6,250	6,376	6,506	6,640	6,780
Turkmenistan <sup>m</sup>	3,518	3,668	3,818	3,970	4,124	4,288	4,435	4,525	4,601	4,685	4,766	4,849	4,934	5,014	5,089	5,158	5,237
Uzbekistan <sup>c</sup>	19,887	20,222	20,608	21,106	21,602	22,092	22,462	22,906	23,349	23,772	24,136	24,488	24,813	25,116	25,428	25,707	26,021

a. Inconsistencies in time series could be due to not re-estimating population numbers in years prior to the Census.  
b. Data for 2004 and 2005 taken from website of Statistical Office of Estonia.  
c. Data refer to de facto population.  
d. Data for 2005 are an IRC estimate; 2001: April 2001 census data .  
e. Data based on US Census Bureau (2005).  
f. Data for 1989 and 2005 are IRC estimates. 2001: March 2001 census data.  
g. Data for 1989 are an IRC estimate.  
h. Data for Kosovo (currently under United Nations administration) for 1999-2002 are SMSO estimates.  
i. Data for 1999: February 1999 census data.  
j. Data for 1998-2005 exclude Transdniestr.  
k. Data for 1989 based on recalculated 1989 census data; 2002: October 2001 census data.  
l. Data for 1994-2005 exclude Abkhazia and Tskhinvali; 2002: January 2002 census data.  
m. Data for 1990-1994 based on 1995 census.

## 1.2 Population aged 0-17 (beginning-of-year, in 1,000s)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Czech Republic	2,804	2,780	2,727	2,679	2,611	2,543	2,467	2,386	2,302	2,226	2,166	2,115	2,067	2,022	1,985	1,948	1,916
Hungary	2,648	2,611	2,589	2,565	2,508	2,439	2,380	2,325	2,270	2,216	2,166	2,119	2,083	2,051	2,021	1,984	1,950
Poland	11,352	11,350	11,319	11,275	11,175	11,032	10,857	10,645	10,418	10,166	9,889	9,614	9,333	8,996	8,664	8,350	8,087
Slovakia	1,615	1,613	1,595	1,584	1,563	1,543	1,514	1,479	1,442	1,405	1,370	1,336	1,301	1,270	1,223	1,195	1,162
Slovenia	511	506	500	490	481	470	459	452	438	425	413	402	393	384	376	368	361
Estonia	415	416	413	407	390	375	363	352	341	332	323	314	306	297	289	-	-
Latvia	681	682	680	673	653	635	619	604	589	572	555	539	522	503	486	469	451
Lithuania	1,000	997	992	989	981	968	950	934	918	902	887	871	853	828	802	775	746
Bulgaria	2,273	2,188	2,138	2,083	2,000	1,954	1,901	1,844	1,791	1,731	1,678	1,634	1,594	1,500	1,459	1,420	1,381
Romania	6,661	6,635	6,543	6,398	6,235	6,069	5,900	5,723	5,553	5,398	5,241	5,108	5,009	4,924	4,754	4,623	4,477
Albania <sup>b</sup>	1,244	1,261	1,257	1,248	1,243	1,245	1,247	1,261	1,276	1,277	1,279	1,284	1,083	1,078	1,062	1,040	1,024
Bosnia-Herzegovina	-	1,311	1,289	1,223	1,117	1,015	952	904	869	888	928	942	941	934	924	916	909
Croatia <sup>c</sup>	1,156	1,149	1,134	1,101	1,098	1,117	1,119	1,100	1,087	1,088	1,083	1,067	932	924	908	889	872
FYR Macedonia	595	595	594	593	588	583	583	582	580	573	565	556	547	538	524	514	504
Serbia and Montenegro	2,923	2,916	2,907	2,846	2,822	2,795	2,767	2,743	2,716	2,685	2,648	2,614	2,578	2,548	-	-	-
Belarus	2,777	2,793	2,786	2,772	2,765	2,742	2,698	2,649	2,593	2,530	2,448	2,397	2,332	2,252	2,171	2,094	2,008
Moldova	1,420	1,439	1,439	1,432	1,415	1,403	1,387	1,366	1,339	1,132	1,107	1,079	1,048	1,009	971	933	895
Russia	40,048	40,178	40,148	40,003	39,636	39,056	38,589	38,015	37,266	36,482	35,585	34,583	33,487	32,298	31,180	30,150	29,054
Ukraine	13,317	13,325	13,257	13,183	13,136	12,973	12,705	12,449	12,151	11,839	11,489	11,143	10,770	10,307	9,843	9,503	9,129
Armenia	1,203	1,243	1,272	1,290	1,301	1,298	1,283	1,265	1,243	1,216	1,183	1,145	1,103	964	947	915	868
Azerbaijan	2,698	2,743	2,781	2,824	2,866	2,891	2,906	2,915	2,920	2,933	3,000	2,961	2,917	2,860	2,798	2,730	2,675
Georgia <sup>d</sup>	1,589	1,582	1,578	1,565	1,507	1,374	1,322	1,278	1,235	1,209	1,187	1,165	1,146	1,137	1,108	1,012	978
Kazakhstan	6,091	6,066	6,038	6,051	6,002	5,924	5,746	5,604	5,467	5,297	5,142	5,053	4,963	4,870	4,777	4,708	4,660
Kyrgyzstan	1,850	1,894	1,923	1,958	1,975	1,894	1,905	1,936	1,962	1,992	2,025	2,025	2,013	1,999	1,984	1,972	1,958
Tajikistan	2,513	2,588	2,657	2,734	2,777	2,797	2,832	2,880	2,912	2,949	2,996	3,034	3,058	3,077	3,094	3,098	3,098
Turkmenistan	1,648	1,721	1,793	1,865	1,937	2,012	2,073	2,105	2,127	2,149	2,165	2,182	2,194	2,200	2,197	2,187	2,178
Uzbekistan	9,332	9,522	9,725	9,973	10,210	10,418	10,553	10,738	10,879	10,974	11,007	11,011	10,984	10,924	10,850	10,714	10,592

a. For population sources, see notes to Table 1.1.  
b. Data for 1989-2000 are IRC estimates based on national data for 5-year age groups;  
c. Data for 1989-2000 and 2002-2005 are IRC estimates based on national data for 5-year age groups.  
d. Data for 1990-2001 and 2003-2005 are IRC estimates based on national data for 5-year age groups.

### 1.3 Population aged 0-4 (beginning-of-year, in 1,000s)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Czech Republic	663	655	642	639	632	622	602	570	532	502	472	455	450	446	451	456	466
Hungary	622	617	615	616	613	606	599	585	563	542	522	502	487	479	478	476	478
Poland	3,145	3,009	2,884	2,799	2,711	2,620	2,540	2,430	2,316	2,218	2,124	2,029	1,985	1,920	1,864	1,821	1,794
Slovakia	426	416	401	394	386	378	367	350	332	317	302	292	286	275	267	262	260
Slovenia	128	125	122	117	112	106	102	100	97	96	94	92	91	90	90	89	89
Estonia	122	121	119	113	104	93	84	76	71	66	63	61	62	61	62	63	65
Latvia	208	209	208	191	178	161	148	134	120	109	100	96	95	95	97	99	101
Lithuania	295	292	288	281	274	263	250	234	219	203	194	188	181	174	167	161	155
Bulgaria	591	569	543	515	482	460	435	409	390	366	348	340	342	321	328	333	334
Romania	1,794	1,811	1,763	1,615	1,507	1,397	1,281	1,225	1,191	1,168	1,155	1,145	1,143	1,134	1,090	1,073	1,062
Albania	379	382	376	368	360	353	345	349	353	342	332	325	270	265	259	255	249
Bosnia-Herzegovina	-	363	357	337	303	265	237	214	201	208	222	229	228	220	207	197	193
Croatia	299	292	284	279	281	283	284	278	275	275	272	266	238	232	221	213	205
FYR Macedonia	168	166	164	162	157	152	153	153	152	148	145	139	134	127	123	120	119
Serbia and Montenegro	806	789	779	765	744	726	710	696	684	679	667	654	640	632	-	-	-
Belarus	819	811	791	754	722	673	624	580	542	503	476	465	458	456	455	451	447
Moldova	438	433	420	400	379	357	338	318	299	245	229	215	204	195	186	181	181
Russia	12,032	11,730	11,320	10,659	9,804	8,896	8,259	7,658	7,184	6,828	6,697	6,476	6,366	6,362	6,472	6,632	6,867
Ukraine	3,791	3,714	3,616	3,474	3,343	3,146	2,950	2,773	2,596	2,442	2,303	2,174	2,069	1,974	1,904	1,931	1,966
Armenia	377	382	383	379	371	355	331	302	273	248	228	213	198	197	192	185	178
Azerbaijan	861	861	864	872	875	854	824	810	773	765	711	654	612	574	559	561	576
Georgia	466	456	449	435	401	354	332	315	297	285	272	258	247	244	238	241	238
Kazakhstan	1,927	1,897	1,852	1,810	1,744	1,654	1,557	1,466	1,372	1,268	1,195	1,130	1,093	1,080	1,084	1,110	1,169
Kyrgyzstan	617	631	641	653	659	510	514	523	530	539	547	529	508	495	490	490	495
Tajikistan	902	928	946	953	942	920	910	900	882	876	889	882	855	853	849	838	835
Turkmenistan	559	583	602	619	639	655	668	656	644	630	616	601	594	588	576	567	563
Uzbekistan	3,225	3,243	3,264	3,302	3,322	3,333	3,322	3,312	3,239	3,153	3,033	2,931	2,792	2,674	2,605	2,564	2,563

a. For population sources, see notes to Table 1.1.

### 1.4 Child dependency ratio (ratio of population aged 0-14 to population aged 15-59, per cent)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Czech Republic	37.2	35.9	34.6	33.4	32.2	31.1	29.9	28.8	27.9	27.0	26.2	25.5	24.8	24.3	23.8	23.3	22.9
Hungary	34.4	33.9	32.7	31.7	30.9	30.1	29.4	28.9	28.3	27.8	27.4	26.9	26.3	25.8	25.5	25.2	24.8
Poland	42.6	42.1	41.5	40.8	39.9	38.9	37.8	36.5	35.2	33.7	32.1	30.6	29.7	28.5	27.3	26.2	25.2
Slovakia	43.5	42.6	41.6	40.6	39.5	38.3	36.9	35.6	34.3	33.0	31.8	30.6	29.4	28.5	27.2	26.3	25.5
Slovenia	33.5	33.0	32.4	31.5	30.8	29.9	29.0	28.3	27.3	26.4	25.7	24.9	24.3	23.7	23.1	22.5	22.1
Estonia	36.6	36.8	36.8	36.4	35.9	35.3	34.7	34.0	33.2	32.3	31.2	30.1	29.1	28.1	26.9	25.6	24.6
Latvia	34.9	35.0	35.1	35.6	35.6	35.2	34.7	34.0	33.1	32.1	30.7	29.4	28.3	27.1	25.8	24.6	23.5
Lithuania	36.7	36.7	36.8	36.8	36.8	36.5	36.1	35.7	35.3	34.8	34.1	33.3	32.3	30.9	29.6	28.5	27.2
Bulgaria	34.8	34.1	33.3	32.4	31.4	30.7	29.8	29.0	28.1	27.2	26.2	25.4	24.8	23.9	23.2	22.4	21.8
Romania	39.6	39.0	38.2	37.3	36.1	34.9	33.7	32.5	31.4	30.8	30.3	29.5	28.6	27.4	26.7	25.5	24.5
Albania	55.8	54.5	55.5	57.7	58.7	58.0	57.0	57.0	57.0	56.1	55.4	54.7	49.2	48.2	46.6	44.9	43.4
Bosnia-Herzegovina	-	37.4	36.8	35.9	34.5	33.1	32.0	31.1	30.3	30.4	30.5	30.1	29.4	28.5	27.4	26.2	25.0
Croatia	32.1	31.8	31.5	30.8	30.6	31.1	31.2	31.8	32.2	32.2	32.1	32.1	30.0	27.5	27.0	26.4	26.1
FYR Macedonia	43.1	42.7	42.2	41.6	41.1	40.4	39.9	39.3	38.7	37.7	36.8	35.7	34.8	33.8	32.8	31.8	30.8
Serbia and Montenegro	38.0	37.6	37.3	37.2	36.8	36.3	35.8	35.3	34.9	34.3	33.7	32.9	32.3	31.7	-	-	-
Belarus	37.8	38.1	38.3	38.1	37.9	37.3	36.5	35.6	34.6	33.4	31.7	30.5	29.2	27.7	26.3	24.9	23.7
Moldova	47.0	47.2	47.0	46.7	46.3	45.6	44.7	43.6	42.3	42.0	40.0	37.9	35.8	33.7	31.7	29.8	28.2
Russia	37.6	37.7	37.6	37.2	36.7	35.7	34.9	34.0	33.0	31.9	30.5	29.1	27.8	26.3	24.8	23.6	22.6
Ukraine	35.7	35.7	35.6	35.2	34.9	34.2	33.5	32.7	32.0	31.3	30.2	29.0	27.7	26.5	25.1	24.0	23.0
Armenia	50.2	50.8	51.4	51.2	50.7	49.8	48.5	46.9	45.2	43.3	41.2	38.8	36.2	36.6	37.5	35.3	34.3
Azerbaijan	55.2	55.7	56.1	56.2	56.3	55.9	55.4	54.7	53.8	53.3	53.8	51.5	49.0	46.2	43.6	40.9	38.7
Georgia <sup>b</sup>	40.7	40.3	39.9	39.4	38.5	37.9	37.4	37.0	36.6	36.2	35.7	35.2	34.8	34.7	33.4	29.4	28.5
Kazakhstan	54.6	54.1	53.7	53.1	52.5	51.6	50.9	50.2	49.3	48.3	47.4	45.8	44.3	42.5	40.7	39.0	37.7
Kyrgyzstan	68.9	68.8	68.8	68.9	69.2	63.5	63.7	63.7	63.7	63.7	63.8	61.9	59.8	57.5	55.2	53.2	51.2
Tajikistan	84.4	84.8	86.2	86.4	87.5	88.0	88.1	88.3	87.3	85.9	84.3	82.5	79.5	76.2	72.9	70.0	67.3
Turkmenistan	76.0	76.3	76.5	76.4	76.5	76.2	75.7	74.5	73.5	72.2	70.9	69.1	67.1	64.7	62.2	59.8	57.4
Uzbekistan	76.8	77.5	77.9	78.0	78.3	77.9	77.2	76.5	75.3	73.7	71.6	69.1	66.3	63.2	60.4	57.6	55.3

a. For general notes on population, see Table 1.1.

b. Ratio for 2004-2005 affected by change in data collection system.

## 2. Natality

### 2.1 Live births (in 1,000s)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	128.4	130.6	129.4	121.7	121.0	106.6	96.1	90.4	90.7	90.5	89.5	90.9	90.7	92.8	93.7	97.7
Hungary	123.3	125.7	127.2	121.7	117.0	115.6	112.1	105.3	100.4	97.3	94.6	97.6	97.0	96.8	94.6	95.1
Poland	564.4	547.7	547.7	515.2	494.3	481.3	433.1	428.2	412.6	395.6	382.0	378.3	368.2	353.8	351.1	356.1
Slovakia	80.1	80.0	78.6	74.6	73.3	66.4	61.4	60.1	59.1	57.6	56.2	55.2	51.1	50.8	51.7	53.7
Slovenia	23.4	22.4	21.6	20.0	19.8	19.5	19.0	18.8	18.2	17.9	17.5	18.2	17.5	17.5	17.3	18.0
Estonia <sup>b</sup>	24.3	22.3	19.4	18.0	15.3	14.2	13.5	13.2	12.6	12.2	12.4	13.1	12.6	13.0	13.0	14.0
Latvia	38.9	37.9	34.6	31.6	26.8	24.3	21.6	19.8	18.8	18.4	19.4	20.2	19.7	20.0	21.0	20.3
Lithuania	55.8	56.9	56.0	54.4	47.5	42.4	41.2	39.1	37.8	37.0	36.4	34.1	31.5	30.0	30.6	30.4
Bulgaria	112.3	105.2	95.9	89.1	84.4	79.4	72.0	72.2	64.1	65.4	72.3	73.7	68.2	66.5	67.4	69.9
Romania	369.5	314.7	275.3	260.4	250.0	246.7	236.6	231.3	236.9	237.3	234.6	234.5	220.4	210.5	212.5	216.3
Albania	78.9	82.1	77.4	75.4	67.7	72.2	72.1	68.4	61.7	60.1	57.9	50.1	48.3	50.1	47.0	43.0
Bosnia-Herzegovina <sup>c</sup>	66.8	67.0	64.8	-	-	-	-	46.6	48.1	45.0	42.5	39.6	37.7	35.6	35.2	34.2
Croatia	55.7	55.4	51.8	47.0	48.5	48.6	50.2	53.8	55.5	47.1	45.2	43.7	41.0	40.1	39.7	40.3
FYR Macedonia	35.9	35.4	34.8	33.2	32.4	33.5	32.2	31.4	29.5	29.2	27.3	29.3	27.0	27.8	27.0	23.4
Serbia and Montenegro <sup>d</sup>	154.6	155.0	152.3	140.8	141.0	137.6	140.5	137.7	131.4	128.5	124.0	125.9	130.2	-	-	-
Belarus	153.4	142.2	132.0	128.0	117.4	110.6	101.1	95.8	89.6	92.6	93.0	93.7	91.7	88.7	88.5	88.9
Moldova <sup>e</sup>	82.2	77.1	72.0	69.7	66.2	62.1	56.4	51.9	45.6	41.3	38.5	36.9	36.4	35.7	36.5	38.3
Russia	2,160.6	1,988.9	1,794.6	1,587.6	1,379.0	1,408.2	1,363.8	1,304.6	1,259.9	1,283.3	1,214.7	1,266.8	1,311.6	1,397.0	1,477.3	1,502.5
Ukraine	691.0	657.2	630.8	596.8	557.5	521.5	492.9	467.2	442.6	419.2	389.2	385.1	376.5	390.7	408.6	427.3
Armenia	75.3	79.9	77.8	70.6	59.0	51.1	49.0	48.1	43.9	39.4	36.5	34.3	32.1	32.2	35.8	37.5
Azerbaijan	181.6	183.0	190.4	181.4	174.6	159.8	143.3	129.2	132.1	124.0	117.5	117.0	110.4	110.7	113.5	131.6
Georgia <sup>f</sup>	91.1	92.8	89.1	72.6	61.6	57.3	56.3	55.0	54.0	51.5	48.7	48.8	47.6	46.6	46.2	49.6
Kazakhstan	380.8	362.1	353.2	337.6	315.5	305.6	276.1	253.2	232.4	222.4	217.6	222.1	221.5	227.2	247.9	273.0
Kyrgyzstan	131.5	128.8	129.5	128.4	116.8	110.1	117.3	108.0	102.1	104.2	104.1	96.8	98.1	101.0	105.5	109.9
Tajikistan	200.4	205.8	212.6	179.5	186.5	191.6	193.2	172.3	178.1	185.7	180.9	167.2	171.6	175.6	177.9	179.6
Turkmenistan	125.0	125.3	126.2	131.0	130.7	129.7	130.2	125.4	126.2	121.9	120.1	119.7	115.4	111.0	111.9	115.1
Uzbekistan	668.8	691.6	723.4	710.5	692.3	657.7	678.0	634.8	602.7	553.7	544.8	527.6	513.0	532.5	508.5	540.4

a. For country differences in the definition of live births, see Aleshina and Redmond (2003) and Glossary.  
b. Data for 2003-2004 taken from website of Statistical Office of Estonia.  
c. Data for 1996-1998 taken from BHAS 2000.  
d. Data for Kosovo 1998-2001 are SMSO estimates.  
e. Data for 1997-2004 exclude Transdnestr.  
f. Data for 1992-2004 exclude Abkhazia and Tskhinvali.

### 2.2 Total fertility rate (births per woman aged 15-49)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	1.87	1.89	1.86	1.72	1.67	1.44	1.28	1.19	1.17	1.16	1.13	1.14	1.15	1.17	1.18	1.23
Hungary	1.78	1.84	1.85	1.76	1.68	1.64	1.57	1.45	1.37	1.33	1.29	1.33	1.31	1.31	1.28	1.28
Poland	2.05	2.04	2.05	1.93	1.85	1.80	1.61	1.60	1.50	1.40	1.40	1.40	1.30	1.30	1.22	1.23
Slovakia	2.08	2.09	2.05	1.98	1.92	1.66	1.52	1.47	1.43	1.38	1.33	1.28	1.20	1.20	1.21	1.25
Slovenia	1.52	1.46	1.42	1.34	1.34	1.32	1.29	1.28	1.25	1.23	1.21	1.26	1.21	1.21	1.20	1.25
Estonia <sup>a</sup>	2.22	2.05	1.80	1.71	1.49	1.42	1.38	1.37	1.32	1.28	1.32	1.39	1.34	1.37	1.37	1.47
Latvia	2.04	2.00	1.85	1.74	1.52	1.41	1.27	1.18	1.13	1.11	1.18	1.24	1.21	1.23	1.29	1.24
Lithuania	1.98	2.03	2.01	1.97	1.74	1.57	1.55	1.49	1.47	1.46	1.46	1.39	1.30	1.24	1.26	1.26
Bulgaria	1.90	1.81	1.65	1.54	1.45	1.37	1.23	1.24	1.09	1.11	1.23	1.27	1.24	1.21	1.23	1.29
Romania <sup>b</sup>	2.20	1.84	1.57	1.52	1.44	1.41	1.34	1.30	1.32	1.32	1.30	1.30	1.23	1.25	1.27	1.29
Albania	2.96	3.03	2.80	2.80	2.60	2.70	2.60	2.50	2.20	2.20	2.10	2.10	2.10	2.10	2.05	1.80
Bosnia-Herzegovina <sup>c</sup>	1.70	1.71	1.65	-	-	-	-	1.65	1.69	1.56	1.36	1.34	1.44	1.23	-	-
Croatia	1.63	1.63	1.53	1.48	1.52	1.47	1.58	1.67	1.69	1.45	1.38	1.39	1.38	1.34	1.33	1.35
FYR Macedonia <sup>d</sup>	2.09	2.06	2.30	2.18	2.16	2.08	1.97	1.90	1.93	1.90	1.75	1.88	1.70	1.77	-	-
Serbia and Montenegro	2.06	2.08	2.08	1.91	1.91	1.85	1.88	1.83	1.74	1.67	1.63	1.64	1.71	-	-	-
Belarus	2.03	1.91	1.81	1.76	1.62	1.53	1.41	1.34	1.25	1.30	1.31	1.31	1.27	1.22	1.21	1.20
Moldova <sup>e</sup>	2.46	2.39	2.26	2.21	2.10	1.95	1.76	1.67	1.60	1.50	1.40	1.30	1.30	1.20	1.20	1.30
Russia	2.01	1.89	1.73	1.55	1.39	1.40	1.34	1.28	1.23	1.24	1.17	1.19	1.22	1.29	1.32	1.34
Ukraine <sup>f</sup>	1.90	1.90	1.70	1.70	1.60	1.50	1.40	1.30	1.30	1.20	1.20	1.10	1.10	1.10	1.20	1.20
Armenia <sup>g</sup>	2.61	2.62	2.58	2.35	1.97	1.70	1.63	1.60	1.45	1.30	1.19	1.11	1.02	1.21	1.35	1.38
Azerbaijan <sup>h</sup>	2.79	2.77	2.89	2.74	2.70	2.52	2.29	2.06	2.07	2.00	2.00	2.00	1.83	1.84	1.91	2.05
Georgia <sup>i</sup>	2.13	2.15	2.07	1.72	1.54	1.52	1.54	1.55	1.55	1.50	1.44	1.46	1.44	1.42	1.37	1.44
Kazakhstan <sup>j</sup>	2.84	2.76	2.72	2.62	2.45	2.41	2.22	2.05	1.90	1.84	1.80	1.85	1.84	1.88	2.03	2.21
Kyrgyzstan <sup>k</sup>	3.80	3.60	3.60	3.50	3.10	2.90	3.10	2.80	2.60	2.80	2.60	2.40	2.40	2.50	2.50	2.60
Tajikistan	5.08	5.09	5.04	4.13	4.23	4.35	4.38	3.94	4.02	4.10	3.84	3.68	-	-	-	-
Turkmenistan <sup>l</sup>	4.30	4.20	4.10	3.90	3.70	3.60	3.50	3.30	3.20	3.10	3.00	2.90	2.80	2.60	2.60	2.60
Uzbekistan <sup>m</sup>	-	4.07	4.20	4.00	3.80	3.53	3.59	3.31	3.08	2.81	2.72	2.58	2.46	2.52	2.36	2.46

a. Data for 2003-2004 taken from website of Statistical Office of Estonia.  
b. 1999 survey reports 1.3 for 1997-1999 (Serbanescu, Morris and Marin, 2001).  
c. Data taken from COE (2003).  
d. Data for 1997 and 2002 taken from COE (2003).  
e. 1997 survey reports 1.8 for 1995-1997 (Serbanescu et al., 1998).  
f. 1999 survey reports 1.42 for 1998-1999 (KIIS, USAID and CDC, 2001).  
g. 2000 survey reports 1.7 for 1998-2000 (NSS, MH and ORC Macro, 2001).  
h. 2001 survey reports 2.1 for 1999-2001 (Serbanescu et al., 2002).  
i. Tsuladze et al. (2001) report 1.67 for 2000; 1999 survey reports 1.7 for 1997-1999 (Serbanescu et al., 2001).  
j. 1999 survey reports 2.05 for 1997-1999 (APM and ORC Macro, 2000).  
k. 1997 survey reports 3.37 for 1995-1997 (RIOP and ORC Macro, 1998).  
l. 2000 survey reports 2.89 for 1998-2000 (GECRCMCH and ORC Macro, 2001).  
m. 1996 survey reports 3.3 for 1994-1996 (CDC, 2003).

### 2.3 Average age of mothers at first birth (years)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	22.5	22.4	22.2	22.2	22.3	22.5	22.9	23.3	23.7	24.1	24.4	24.9	25.3	25.7	26.1	26.6
Hungary	23.1	23.0	23.0	23.1	23.1	23.2	23.4	23.7	23.9	24.3	24.7	25.0	25.3	25.7	26.1	26.5
Poland <sup>a</sup>	23.0	23.0	22.9	22.6	22.6	22.7	22.8	22.9	23.1	23.2	23.5	23.7	24.0	24.3	24.9	24.2
Slovakia	22.0	21.0	21.1	21.1	21.3	21.5	21.8	22.1	23.1	23.3	23.6	23.9	24.1	24.5	24.9	25.3
Slovenia	23.7	23.9	24.2	24.3	24.7	24.8	25.1	25.3	25.6	25.8	26.2	26.5	26.7	27.2	27.3	27.5
Estonia <sup>b</sup>	22.8	22.7	22.6	22.7	22.8	22.8	23.0	23.1	23.4	23.6	23.8	24.0	24.2	24.6	24.8	25.0
Latvia	23.4	23.2	23.1	23.0	23.0	23.4	23.5	23.6	24.0	24.1	24.2	24.4	24.6	24.8	24.9	25.0
Lithuania	23.4	23.3	23.2	23.1	23.2	23.0	23.2	23.2	23.4	23.6	23.8	23.9	24.2	24.3	24.5	24.8
Bulgaria	22.0	22.1	22.0	22.0	22.1	22.3	22.2	22.4	22.7	22.9	23.0	23.5	23.8	24.0	24.3	24.5
Romania	22.5	22.4	22.2	22.3	22.4	22.5	22.7	22.9	23.1	23.3	23.5	23.7	23.9	24.2	24.3	24.6
Albania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bosnia-Herzegovina	23.6	23.6	-	-	-	-	-	-	-	24.1	24.4	24.4	24.4	24.4	24.1	24.5
Croatia	26.6	24.3	24.4	24.5	24.7	24.8	25.0	25.1	25.2	25.4	25.4	25.6	25.8	25.9	26.1	26.3
FYR Macedonia	23.3	23.3	23.4	23.4	23.3	23.5	23.5	23.7	23.7	23.9	24.0	24.2	24.3	24.6	24.7	24.8
Serbia and Montenegro <sup>c</sup>	23.9	24.0	24.1	24.2	24.1	23.8	23.9	24.7	24.2	24.3	24.4	24.5	24.8	24.8	-	-
Belarus	23.1	22.9	22.9	22.8	22.8	22.8	22.9	23.0	23.0	23.1	23.2	23.3	23.3	23.5	23.6	23.7
Moldova	-	-	-	-	-	-	-	-	-	22.0	21.8	21.8	21.9	22.1	22.3	22.4
Russia	23.1	22.9	22.8	22.8	22.6	22.5	22.6	22.8	22.9	23.0	-	-	-	-	-	-
Ukraine <sup>d</sup>	-	-	-	-	-	-	-	-	-	24.1	-	-	-	22.6	22.4	23.1
Armenia	22.7	22.8	22.5	22.2	22.0	22.0	22.5	22.2	22.3	22.5	22.3	22.4	22.4	22.4	22.4	22.5
Azerbaijan	23.8	23.8	24.0	24.0	23.9	23.9	23.8	24.0	23.5	23.7	23.9	24.1	24.1	23.9	23.8	24.0
Georgia	23.7	23.7	23.7	23.6	-	23.4	23.5	23.6	24.1	24.0	24.0	24.2	24.7	24.7	24.5	24.7
Kazakhstan	22.6	22.4	22.4	22.4	22.3	22.1	22.2	22.3	22.5	22.6	23.2	23.4	23.5	23.7	24.0	23.9
Kyrgyzstan	22.3	22.2	22.2	22.9	21.9	21.9	21.9	21.9	22.0	22.3	22.5	22.7	22.8	23.1	23.2	23.4
Tajikistan	22.6	22.4	22.3	22.2	21.9	21.7	21.8	22.8	22.7	22.2	22.1	-	-	-	-	-
Turkmenistan	24.3	24.3	24.3	24.2	24.2	24.2	24.1	24.2	24.1	24.0	24.0	24.2	24.3	24.3	24.4	24.6
Uzbekistan	22.6	22.4	22.2	22.3	22.0	22.0	22.2	22.3	22.6	23.0	23.1	23.2	23.0	23.4	23.3	23.6

a. Median age.  
b. Data for 2003-2004 taken from website of Statistical Office of Estonia.  
c. Data for Kosovo 1998-2001 are SMSO estimates; data for 2002 exclude Kosovo.  
d. Data will be recalculated for the whole period.

### 2.4 Adolescent birth rate (live births per 1,000 women aged 15-19)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	44.9	44.7	46.7	44.7	42.9	32.6	24.9	20.1	18.0	16.4	15.3	13.2	11.5	11.6	11.4	11.3
Hungary	41.3	40.2	38.7	36.3	34.7	34.3	31.9	29.8	27.7	25.9	23.5	23.6	22.1	21.6	20.9	21.0
Poland	30.9	31.5	32.2	29.3	27.2	25.5	22.0	21.1	19.5	18.7	17.5	16.9	15.9	15.4	14.8	14.1
Slovakia	46.8	45.5	50.2	47.4	45.7	38.3	32.4	30.5	28.6	26.9	25.6	24.0	21.4	21.4	20.7	20.4
Slovenia	27.2	24.6	21.1	19.4	16.1	14.3	13.3	11.1	9.2	8.5	7.9	7.6	6.7	6.0	5.8	5.3
Estonia	53.4	55.0	53.9	50.5	44.2	40.5	37.9	35.6	31.1	27.5	26.4	25.6	23.8	21.9	20.9	21.5
Latvia	44.7	49.9	50.8	48.6	44.1	34.0	29.9	25.8	21.5	19.0	19.0	18.3	17.2	16.0	16.6	16.1
Lithuania	36.6	41.2	47.0	48.9	43.5	41.7	40.9	37.9	33.6	30.1	26.6	24.6	21.0	20.6	20.5	19.4
Bulgaria	75.2	72.7	72.7	70.5	67.3	60.8	53.5	51.2	45.1	45.1	49.1	47.1	44.7	41.5	40.4	41.7
Romania	59.9	51.8	50.2	48.0	47.7	45.7	42.6	40.5	41.4	40.8	40.4	39.6	36.2	32.8	33.6	34.4
Albania	15.6	15.3	14.8	16.5	17.3	21.2	22.9	22.8	19.4	17.7	15.9	15.7	16.6	20.1	16.4	14.4
Bosnia-Herzegovina	38.2	38.3	38.3	-	-	-	-	33.9	38.3	23.6	21.4	18.0	18.4	16.3	14.8	14.0
Croatia	29.5	27.4	25.3	22.7	20.4	19.6	18.3	20.0	18.6	16.5	16.1	15.8	15.4	14.9	14.0	13.8
FYR Macedonia	53.0	50.3	46.9	43.9	47.0	45.7	44.2	38.9	36.6	33.7	30.8	31.8	27.1	25.9	25.7	23.0
Serbia and Montenegro	42.8	41.1	39.2	35.5	35.3	34.0	32.2	30.2	28.2	26.5	24.7	25.2	25.3	-	-	-
Belarus	39.8	43.6	45.1	46.0	43.7	43.0	39.5	36.3	33.7	31.2	29.5	27.0	25.7	23.4	23.2	22.0
Moldova	56.2	57.8	61.6	62.1	65.7	65.1	61.7	53.1	47.7	43.6	38.9	36.3	33.6	30.2	29.2	29.2
Russia	52.1	55.0	54.1	50.6	46.7	48.4	44.3	38.5	35.4	33.1	28.5	27.1	27.0	27.1	27.3	28.2
Ukraine	55.3	58.8	59.8	59.8	57.7	56.2	54.3	50.8	45.7	41.2	34.9	32.1	28.9	29.2	28.9	29.4
Armenia	62.7	70.0	76.6	82.5	77.0	68.0	56.2	53.3	43.4	34.6	29.8	27.3	23.4	28.0	29.3	29.8
Azerbaijan	28.0	26.7	30.6	35.0	38.2	40.4	39.5	35.8	41.4	36.4	31.8	28.9	26.4	26.3	27.7	31.0
Georgia	58.0	56.6	56.6	49.5	55.4	65.3	63.0	58.7	54.4	50.7	45.9	39.4	32.2	32.7	34.2	37.2
Kazakhstan	47.9	52.3	54.6	52.0	52.8	54.6	49.8	44.8	39.2	37.2	33.6	30.9	28.1	25.6	25.6	25.6
Kyrgyzstan	44.7	47.4	52.3	56.2	57.2	51.9	53.6	51.9	44.3	42.7	39.0	34.1	32.8	30.5	28.5	27.0
Tajikistan	38.5	40.3	46.2	41.2	53.7	56.7	52.3	-	-	-	-	-	-	-	-	-
Turkmenistan	21.9	23.5	25.0	25.8	29.4	26.7	24.9	25.1	27.2	28.4	27.6	26.1	24.1	22.3	22.2	19.8
Uzbekistan	41.1	44.0	48.2	56.7	68.1	64.8	59.2	56.7	49.2	27.5	24.1	21.1	17.3	15.1	12.4	9.5

a. For natality sources see notes to Table 2.1; for population sources, see notes to Table 1.1.

## 2.5 Share of births to mothers under age 20 (as per cent of total live births)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	13.6	14.1	15.5	16.2	15.8	13.5	11.0	9.0	7.7	6.7	6.0	4.9	4.2	4.1	4.0	3.7
Hungary	12.3	12.3	12.3	12.4	12.6	12.5	11.5	11.0	10.2	9.4	8.4	8.0	7.4	7.1	7.0	6.9
Poland	7.4	8.0	8.5	8.4	8.3	8.2	8.0	7.8	7.6	7.7	7.5	7.3	7.0	6.9	6.4	5.8
Slovakia	11.9	12.0	14.0	14.3	14.3	13.4	12.3	11.7	11.0	10.5	10.1	9.5	9.1	9.0	8.4	7.9
Slovenia	8.2	7.8	7.0	7.0	5.9	5.4	5.1	4.3	3.6	3.4	3.1	2.8	2.5	2.2	2.1	1.8
Estonia	11.7	13.1	14.7	14.6	14.7	14.2	13.7	13.0	12.0	11.1	10.7	10.0	9.7	8.8	8.4	8.0
Latvia	10.3	11.7	12.7	12.9	13.5	11.4	11.2	10.5	9.3	8.6	8.4	7.9	7.8	7.3	7.3	7.2
Lithuania	8.9	9.8	11.2	11.7	11.7	12.4	12.4	12.0	11.0	10.1	9.2	9.3	8.8	9.3	9.2	8.6
Bulgaria	20.9	21.4	23.5	24.6	24.9	23.7	22.6	21.1	20.4	19.5	18.8	17.4	17.1	16.2	15.4	15.2
Romania	15.1	15.2	16.9	17.4	18.4	17.9	17.3	16.5	16.0	15.0	14.4	13.8	13.2	12.7	13.3	13.5
Albania	3.0	2.9	2.9	3.3	3.8	4.4	4.8	5.1	4.9	4.6	4.4	4.9	5.2	6.1	5.4	5.2
Bosnia-Herzegovina	10.4	10.4	10.5	-	-	-	-	8.1	9.1	7.1	7.0	6.4	7.0	6.6	6.2	6.3
Croatia	11.7	7.9	7.8	7.2	6.5	6.2	5.7	5.6	5.1	5.2	5.4	5.3	5.5	5.4	5.0	4.7
FYR Macedonia	11.1	10.8	10.5	10.4	11.5	10.9	11.0	10.0	10.1	9.4	9.2	8.8	8.2	7.6	7.7	7.9
Serbia and Montenegro <sup>b</sup>	10.6	10.3	10.0	9.8	9.9	9.8	9.0	8.6	8.4	8.0	7.8	7.7	7.5	7.7	-	-
Belarus	9.2	11.0	12.3	12.9	13.4	14.1	14.3	14.0	14.1	12.8	12.4	11.5	11.4	10.9	10.8	10.0
Moldova	11.1	12.8	15.1	15.9	17.7	18.9	19.8	18.6	17.9	17.4	17.2	16.9	16.3	15.2	14.4	13.6
Russia	11.8	13.9	15.4	16.5	17.7	18.2	17.5	16.1	15.6	14.7	13.8	12.9	12.6	12.2	11.5	11.4
Ukraine	14.1	16.1	17.3	18.3	18.9	19.5	19.9	19.5	18.4	17.8	16.5	15.5	14.6	14.2	13.3	12.6
Armenia	11.3	12.5	14.5	17.6	20.0	20.8	18.3	18.1	16.5	15.0	14.4	14.4	13.5	13.7	13.0	12.6
Azerbaijan	5.0	4.7	5.2	6.3	7.2	8.4	9.3	9.5	11.0	10.7	10.3	9.8	9.7	10.0	10.6	10.4
Georgia	12.9	12.8	13.5	14.4	18.2	22.0	21.1	19.7	18.4	17.9	17.1	14.6	12.2	12.5	12.8	12.5
Kazakhstan	8.7	10.0	10.9	11.2	12.2	13.0	13.0	12.6	12.0	11.6	10.5	9.8	9.2	8.4	7.9	7.3
Kyrgyzstan	6.9	7.6	8.5	9.3	10.8	10.8	10.6	11.3	10.3	9.9	9.3	9.0	8.8	8.2	7.6	7.0
Tajikistan	5.1	5.3	5.9	6.3	8.0	8.3	7.7	-	-	-	-	-	-	-	-	-
Turkmenistan	3.2	3.6	3.9	4.0	4.7	4.5	4.3	4.6	5.0	5.6	5.7	5.6	5.5	5.5	5.6	5.0
Uzbekistan	6.3	6.6	7.0	8.5	10.7	10.9	9.9	10.4	9.8	6.2	5.7	5.3	4.7	4.1	3.7	2.7

a. For natality sources see notes to Table 2.1.

b. Data for 2002 exclude Kosovo.

## 2.6 Share of non-marital births (as per cent of total live births)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	7.9	8.6	9.8	10.7	12.7	14.5	15.6	16.9	17.8	19.0	20.6	21.8	23.5	25.3	28.5	30.6
Hungary	12.4	13.1	14.1	15.6	17.6	19.4	20.7	22.6	25.0	26.6	28.0	29.0	30.3	31.4	32.3	34.0
Poland	6.1	6.5	6.9	7.5	8.5	9.0	9.5	10.2	11.0	11.6	11.7	12.1	13.1	14.4	15.8	17.1
Slovakia	7.2	7.6	8.9	9.8	10.6	11.7	12.6	14.0	15.1	15.3	16.9	18.3	19.8	21.6	23.3	24.8
Slovenia	23.2	24.5	26.4	27.7	28.0	28.8	29.8	31.9	32.7	33.6	35.4	37.1	39.4	40.2	42.5	44.8
Estonia	25.3	27.2	31.2	33.9	38.2	41.0	44.2	48.1	51.6	52.5	54.2	54.5	56.2	56.3	57.8	58.0
Latvia	15.9	16.9	18.4	19.6	23.0	26.4	29.9	33.1	34.8	37.1	39.1	40.3	42.1	43.1	44.2	45.3
Lithuania	6.7	7.0	7.0	7.9	9.1	10.9	12.8	14.3	16.5	18.0	19.8	22.6	25.4	27.9	29.5	28.7
Bulgaria	11.4	12.4	15.5	18.5	22.1	24.5	25.7	28.1	30.0	31.5	35.1	38.4	42.0	42.8	46.1	48.7
Romania	-	-	-	-	17.0	18.3	19.7	20.7	22.2	23.0	24.1	25.5	26.7	26.7	28.2	29.4
Albania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bosnia-Herzegovina	6.9	7.4	7.9	-	-	-	-	8.1	9.1	11.4	12.4	11.8	11.0	11.2	13.6	13.2
Croatia	6.6	7.0	7.5	7.7	7.7	7.6	7.5	7.1	7.3	8.1	8.2	9.0	9.4	9.6	10.1	10.4
FYR Macedonia	7.0	7.1	7.0	7.3	8.1	8.5	8.2	8.2	8.9	9.5	9.8	9.8	10.4	10.7	11.2	12.3
Serbia and Montenegro <sup>b</sup>	12.4	12.7	13.6	14.0	15.8	16.0	16.4	17.8	19.1	19.9	20.2	20.4	20.2	20.4	-	-
Belarus	7.9	8.5	9.4	9.8	10.9	12.1	13.5	14.9	16.2	17.0	17.8	18.6	20.5	21.4	23.0	23.9
Moldova	10.4	11.0	11.8	11.6	11.2	12.3	13.3	14.6	17.3	17.8	18.8	20.5	22.5	22.9	23.7	24.5
Russia	13.5	14.6	16.0	17.1	18.2	19.6	21.1	23.0	25.3	27.0	27.9	28.0	28.8	29.5	31.0	29.8
Ukraine	10.8	11.2	11.9	12.1	13.0	12.8	13.2	13.6	15.2	16.2	17.4	17.3	18.0	19.0	19.9	20.4
Armenia	7.9	9.3	10.9	12.3	14.0	15.3	15.2	22.3	25.8	28.2	31.3	34.6	36.3	36.3	36.0	36.4
Azerbaijan <sup>c</sup>	2.5	2.6	3.7	4.4	5.0	5.2	5.8	6.8	7.5	5.6	6.4	5.4	6.6	7.6	10.5	20.3
Georgia	17.7	18.2	18.7	21.8	25.1	28.4	29.2	30.9	33.4	35.4	36.4	41.1	44.4	45.9	44.6	47.7
Kazakhstan	12.0	13.2	13.4	13.4	13.4	14.5	15.7	17.6	21.0	21.8	23.9	24.5	25.4	25.8	24.8	24.9
Kyrgyzstan	12.7	13.0	13.9	13.2	16.7	16.8	18.5	21.1	24.1	27.4	28.8	32.1	32.0	32.7	31.7	32.3
Tajikistan	7.0	6.9	8.2	7.5	9.2	-	-	-	-	-	-	-	-	-	-	-
Turkmenistan	3.5	4.4	4.7	3.5	3.8	4.3	4.6	5.0	6.0	7.6	7.1	9.3	8.9	8.4	8.5	10.3
Uzbekistan	4.2	4.4	3.8	3.4	3.8	3.5	4.1	5.3	6.4	8.4	9.4	11.1	11.1	10.2	11.5	13.0

a. For natality sources see notes to Table 2.1.

b. Data for 2002 exclude Kosovo.

c. 2003-2004: increases due to improved data collection on non-marital births.

## 2.7 Share of low-weight births (births under 2,500 grams as per cent of total live births)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	5.2	5.5	5.9	5.7	5.6	5.5	5.5	5.5	5.6	5.9	5.9	5.8	6.0	6.2	6.6	6.8
Hungary	9.2	9.3	9.3	9.0	8.6	8.6	8.2	8.3	8.4	8.3	8.5	8.4	8.5	8.5	8.7	8.3
Poland	7.9	8.4	8.3	8.1	8.1	7.2	6.7	6.4	6.1	6.2	6.0	5.7	5.9	6.0	5.9	6.1
Slovakia	5.6	5.8	6.1	6.5	6.4	6.4	6.5	6.6	6.1	6.5	6.6	6.7	7.0	6.9	7.0	7.2
Slovenia	5.9	5.0	5.3	5.8	5.5	5.4	5.2	5.7	5.2	5.2	5.8	5.6	5.7	6.0	5.8	5.8
Estonia <sup>b</sup>	-	-	-	4.3	3.8	4.5	4.4	4.2	4.3	4.4	4.7	4.3	4.3	4.6	4.4	4.3
Latvia	-	-	4.6	5.0	5.1	5.0	4.8	5.1	5.0	4.2	5.3	4.5	5.2	4.9	5.0	5.0
Lithuania	-	-	-	2.9	3.1	3.3	4.2	4.3	4.2	4.5	4.4	4.6	4.4	4.8	4.1	4.4
Bulgaria	6.9	7.2	8.3	8.4	8.3	8.4	8.6	9.1	9.9	9.4	9.7	9.6	9.7	9.7	9.7	9.4
Romania <sup>c</sup>	7.3	7.1	7.9	8.2	10.9	8.6	8.8	8.9	9.2	9.0	8.7	8.9	8.8	9.0	9.5	9.5
Albania	6.5	6.5	6.3	5.8	5.6	5.7	5.5	5.4	5.2	5.2	5.0	4.9	3.4	2.8	4.7	4.5
Bosnia-Herzegovina <sup>d</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croatia <sup>e</sup>	5.8	5.3	5.5	6.0	6.0	5.9	5.4	5.0	4.7	5.5	5.9	5.8	4.7	5.5	4.9	5.0
FYR Macedonia	-	-	-	-	-	5.1	5.3	5.3	5.1	5.6	5.5	5.8	5.4	5.4	5.7	6.5
Serbia and Montenegro <sup>f</sup>	-	-	-	-	-	4.9	5.3	5.3	5.0	5.0	5.0	5.1	4.3	5.4	-	-
Belarus <sup>g</sup>	4.0	4.0	4.1	4.1	4.4	4.7	4.9	4.7	4.8	5.0	4.9	4.8	5.0	5.0	5.2	5.3
Moldova <sup>h</sup>	7.1	5.6	5.6	5.5	5.5	5.8	6.1	5.8	6.0	6.0	6.8	6.6	5.4	5.1	5.3	4.8
Russia	5.6	5.6	5.6	5.8	6.2	6.2	6.1	6.0	6.2	6.2	6.6	6.3	6.3	6.2	6.0	5.9
Ukraine <sup>i</sup>	-	-	-	5.2	5.3	5.6	5.7	5.5	5.5	5.4	5.7	5.4	5.3	5.2	5.3	5.0
Armenia <sup>j</sup>	6.8	6.5	6.7	7.7	7.4	6.5	7.4	7.5	7.5	8.3	8.4	8.5	7.3	8.0	8.2	7.5
Azerbaijan <sup>k</sup>	5.6	5.2	4.9	5.2	5.4	5.5	5.7	4.4	4.5	4.9	5.1	5.0	5.4	5.9	5.7	6.3
Georgia <sup>l</sup>	6.0	4.9	8.6	5.8	6.0	6.6	6.8	7.0	6.7	5.8	6.2	5.9	6.4	6.3	6.8	6.0
Kazakhstan <sup>m</sup>	5.8	5.7	6.5	5.7	6.0	6.5	6.1	6.4	6.0	5.9	5.9	5.9	5.3	6.1	5.5	5.2
Kyrgyzstan <sup>n</sup>	5.3	4.9	4.6	5.0	5.1	5.5	5.2	5.5	5.3	5.4	5.2	5.3	5.1	5.2	5.2	4.8
Tajikistan	5.6	-	5.4	6.5	6.0	5.6	5.0	5.0	3.9	3.5	3.7	3.9	3.5	3.6	3.1	3.3
Turkmenistan <sup>o</sup>	3.9	4.5	4.2	4.0	4.6	4.2	3.8	3.8	3.6	3.5	3.7	3.3	3.0	3.2	3.9	3.5
Uzbekistan <sup>p</sup>	-	5.1	5.0	5.6	5.4	5.8	5.9	4.9	4.7	5.1	5.0	4.7	4.6	4.6	4.8	4.8

a. For natality sources see notes to Table 2.1.  
b. Data for 2003 and 2004 taken from WHO European HFA database (2006).  
c. 1999 survey reports 9.0 for 1995-1999 (Serbanescu, Morris and Marin, 2001).  
d. 2000 survey reports 3.3 (BHAS and UNICEF 2000).  
e. Data for 2004 taken from WHO European HFA database (2006).  
f. Data for 2002 exclude Kosovo.  
g. Data exclude births under 1000 grams.  
h. 1997 survey reports 5.4 for 1995-1997 (Serbanescu et al., 1998).  
i. 1999 survey reports 5.0 for 1995-1999 (CDC, 2003).  
j. 2000 survey reports 6.0 for 1995-2000 (NSS, MH and ORC Macro, 2001).  
k. 2001 survey reports 11.9 for 1996-2000 (Serbanescu et al., 2002).  
l. 1999 survey reports 5.5 for 1995-1999 (Serbanescu et al., 2001).  
m. 1999 survey reports 7.3 for 1995-1999 (APM and ORC Macro, 2000).  
n. 1997 survey reports 5.7 for 1995-1997 (RIOP and ORC Macro, 1998).  
o. 2000 survey reports 5.7 for 1995-2000 (ORC Macro, 2001).  
p. 2000 survey reports 5.7 (SDSU and UNICEF 2000).

## 2.8 Abortion rate (abortions per 100 live births)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	98.6	96.5	92.8	89.8	70.6	63.3	64.1	66.3	62.8	61.5	58.2	52.1	49.7	47.1	45.2	42.3
Hungary <sup>b</sup>	87.8	85.9	84.1	84.7	77.9	77.9	82.3	86.8	89.5	85.9	85.1	76.0	74.3	75.0	74.1	72.5
Poland <sup>c</sup>	14.6	10.8	5.6	2.3	0.3	0.2	0.1	0.1	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Slovakia	70.3	70.2	67.6	66.4	62.2	62.2	58.4	51.4	47.0	46.3	45.5	42.8	44.6	43.5	40.9	37.4
Slovenia	67.7	65.9	65.0	66.3	61.4	58.2	56.9	54.4	53.5	51.1	49.7	46.4	44.6	41.9	39.7	35.6
Estonia	116.0	131.9	151.5	157.5	167.8	158.4	151.9	147.0	152.3	151.4	137.0	117.3	111.2	101.1	99.8	90.2
Latvia	-	93.4	112.1	108.7	117.1	110.5	120.1	122.5	115.6	108.4	93.0	85.1	79.6	73.3	69.1	67.5
Lithuania	-	-	72.8	75.3	74.2	71.6	75.9	71.2	60.0	56.8	51.8	47.6	43.4	41.6	37.6	35.0
Bulgaria	117.6	137.5	144.3	149.1	127.3	122.8	134.9	136.5	137.1	122.2	100.1	83.3	75.0	76.4	71.3	67.6
Romania <sup>d</sup>	52.1	315.3	314.9	265.7	234.3	214.9	212.5	197.2	146.5	114.4	110.8	110.0	115.6	117.6	105.8	88.3
Albania	29.6	31.8	39.3	36.8	49.4	43.4	44.8	40.6	35.8	31.5	34.4	41.9	35.5	27.8	25.7	24.4
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croatia	92.2	84.2	77.8	74.3	64.4	53.5	39.8	36.5	29.5	32.5	32.5	31.7	31.9	29.9	27.7	-
FYR Macedonia	84.7	61.8	66.5	59.7	57.0	49.2	49.2	45.1	40.9	41.1	31.0	38.9	31.6	-	-	-
Serbia and Montenegro <sup>e</sup>	130.5	126.2	103.5	101.1	84.6	71.9	68.9	60.7	48.8	45.7	-	-	-	-	-	-
Belarus <sup>f</sup>	163.5	179.2	178.2	183.1	181.2	187.8	186.5	177.4	166.2	152.2	140.7	124.2	104.6	95.6	82.4	70.3
Moldova <sup>g</sup>	110.5	106.3	102.0	102.5	97.0	94.7	101.4	88.7	83.9	80.4	72.5	70.5	44.0	44.1	48.1	46.9
Russia	204.9	206.3	201.1	216.5	235.2	217.3	202.8	203.3	198.3	182.8	179.6	168.8	153.6	139.2	126.2	119.6
Ukraine <sup>h</sup>	153.2	155.1	151.7	156.2	154.4	153.1	150.2	147.1	134.8	125.3	127.4	112.7	98.2	88.6	77.3	67.7
Armenia <sup>i</sup>	34.7	31.6	34.9	39.6	47.3	59.8	62.8	65.1	57.5	46.5	39.5	34.3	32.5	29.1	30.0	28.0
Azerbaijan	21.5	13.4	17.9	17.5	19.4	20.8	20.0	21.9	19.1	20.1	17.8	15.0	16.6	15.0	14.9	15.0
Georgia <sup>j</sup>	75.6	65.9	66.7	69.9	73.3	85.4	77.2	58.1	43.3	40.8	37.6	30.6	31.5	29.8	29.9	37.1
Kazakhstan <sup>k</sup>	77.5	76.9	101.5	102.6	92.1	85.7	81.2	76.7	67.5	67.1	63.5	60.4	61.8	54.8	51.3	47.4
Kyrgyzstan <sup>l</sup>	66.3	57.3	51.3	46.3	45.1	44.8	36.2	31.6	31.0	27.0	24.8	22.8	23.8	18.8	18.2	18.2
Tajikistan	20.1	19.6	24.5	26.2	21.5	18.6	16.9	16.5	15.3	13.2	11.7	13.2	11.1	12.0	10.6	11.4
Turkmenistan <sup>m</sup>	28.0	28.5	28.1	35.9	25.2	25.8	26.0	25.5	26.3	20.7	16.7	16.9	15.0	15.2	13.2	12.8
Uzbekistan	-	27.8	26.1	27.0	21.4	18.2	17.5	17.6	14.1	13.5	12.1	11.7	11.7	11.0	10.4	9.4

a. For natality sources see notes to Table 2.1.  
b. Including spontaneous abortions.  
c. Since 1993 by legislation for fetus protection abortion is allowed only in exceptional case.  
d. 1999 survey reports 150 per 100 live births for 1996-1999 (Serbanescu, Morris and Marin, 2001).  
e. Abortions performed by private practitioners are underreported (MONEE project country analytical report, Serbia and Montenegro, 2001).  
f. Data for 1989-1995 include spontaneous abortions.  
g. Data for 2001-2003 exclude Transdnestr; 1997 survey reports 69.6 for 1993-1997 (Serbanescu et al., 1998).  
h. 1999 survey reports 110 for 1998-1999 (KIIS, USAID and CDC, 2001).  
i. 2000 survey reports 146.3 for 1998-2000 (NSS, MH and ORC Macro, 2001).  
j. 1999 survey reports 210 for 1997-1999 (Serbanescu et al., 2001). 2004 data taken from WHO European HFA database (2006).  
k. 1999 survey reports 70.8 for 1997-1999 (APM and ORC Macro, 2000).  
l. 1997 survey reports 43.2 for 1995-1997 (RIOP and ORC Macro, 1998).  
m. 2000 survey reports 25.7 for 1998-2000 (GECRCMCH and ORC Macro, 2001).

### 3. Child and maternal mortality

#### 3.1 Infant mortality rate (per 1,000 live births)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	10.0	10.8	10.4	9.9	8.5	7.9	7.7	6.0	5.9	5.2	4.6	4.1	4.0	4.1	3.9	3.7
Hungary	15.7	14.8	15.6	14.1	12.5	11.5	10.7	10.9	9.9	9.7	8.4	9.2	8.1	7.2	7.3	6.6
Poland	19.1	19.3	18.2	17.3	16.1	15.1	13.6	12.2	10.2	9.5	8.9	8.1	7.7	7.5	7.0	6.8
Slovakia	13.5	12.0	13.2	12.6	10.6	11.2	11.0	10.2	8.7	8.8	8.3	8.6	6.2	7.6	7.9	6.8
Slovenia	8.1	8.4	8.2	8.9	6.8	6.5	5.5	4.7	5.2	5.2	4.5	4.9	4.2	3.8	4.0	3.7
Estonia <sup>b</sup>	14.8	12.3	13.3	15.7	15.6	14.4	14.9	10.5	10.0	9.4	9.6	8.4	8.8	5.7	7.0	6.4
Latvia	11.3	13.7	15.7	17.6	16.2	15.7	18.8	15.9	15.3	15.0	11.3	10.4	11.0	9.8	9.4	9.4
Lithuania	10.7	10.3	14.4	16.3	15.4	14.0	12.4	10.0	10.3	9.2	8.6	8.5	7.8	7.9	6.8	7.9
Bulgaria	14.4	14.8	16.9	15.9	15.5	16.3	14.8	15.6	17.5	14.4	14.6	13.3	14.4	13.3	12.3	11.6
Romania <sup>c</sup>	26.9	26.9	22.7	23.3	23.3	23.9	21.2	22.3	22.0	20.5	18.6	18.6	18.4	17.3	16.7	16.8
Albania	30.8	28.3	32.9	33.8	35.4	35.3	30.0	25.8	22.5	20.5	17.5	16.0	17.5	-	-	-
Bosnia-Herzegovina <sup>d</sup>	18.4	15.3	14.6	20.6	22.7	13.8	13.2	14.0	12.5	11.0	10.1	9.7	7.6	9.4	7.6	7.4
Croatia	11.7	10.7	11.1	11.6	9.9	10.2	9.0	8.4	8.2	8.2	7.7	7.4	7.7	7.0	6.3	6.1
FYR Macedonia	36.7	31.6	28.2	30.6	24.1	22.5	22.7	16.4	15.7	16.3	14.9	11.8	11.9	10.2	11.3	13.2
Serbia and Montenegro <sup>e</sup>	29.3	22.8	20.9	21.7	21.9	18.4	16.8	15.0	14.3	13.9	13.6	13.3	13.1	10.2	-	-
Belarus	11.8	11.9	12.1	12.3	12.5	13.2	13.3	12.5	12.4	11.3	11.5	9.3	9.1	7.8	7.7	6.9
Moldova <sup>f</sup>	20.4	19.0	19.8	18.4	21.5	22.6	21.2	20.2	19.8	17.5	18.2	18.3	16.3	14.7	14.4	12.2
Russia	17.8	17.4	17.8	18.0	19.9	18.6	18.1	17.4	17.2	16.5	16.9	15.3	14.7	13.3	12.4	11.6
Ukraine	13.0	12.8	13.9	14.0	14.9	14.5	14.4	14.3	14.0	12.8	12.8	11.9	11.3	10.3	9.6	9.5
Armenia <sup>g</sup>	20.4	18.5	17.9	18.5	17.1	14.7	14.2	15.5	15.4	14.7	15.4	15.6	15.4	14.0	12.0	11.5
Azerbaijan <sup>h</sup>	26.2	23.0	25.3	25.5	28.2	25.2	23.3	19.9	19.6	16.6	16.5	12.8	12.5	12.8	12.8	9.8
Georgia <sup>i</sup>	19.6	20.7	20.8	22.1	27.6	28.6	28.2	28.0	23.9	22.0	22.2	22.6	22.9	23.8	24.8	23.8
Kazakhstan <sup>j</sup>	25.6	26.3	27.3	25.9	28.1	27.1	27.0	25.4	24.9	21.6	20.4	18.8	19.1	17.0	15.7	14.5
Kyrgyzstan <sup>k</sup>	32.2	30.0	29.7	31.5	31.9	29.1	28.1	25.9	28.2	26.2	22.7	22.6	21.7	21.2	20.9	25.7
Tajikistan <sup>l</sup>	43.2	40.7	40.6	45.9	47.0	42.5	44.0	47.4	48.4	44.8	44.2	43.9	43.2	43.8	43.6	-
Turkmenistan <sup>m</sup>	54.7	45.2	47.0	43.6	45.9	46.4	42.2	40.5	37.8	32.9	25.4	21.4	20.1	17.7	16.4	14.1
Uzbekistan <sup>n</sup>	38.1	34.6	35.5	37.4	32.0	28.2	26.0	24.2	22.8	21.8	20.2	18.9	18.3	16.7	16.4	15.4

a. For sources of live births, see notes to Table 2.1; for country differences in the definition of live births, see Aleshina and Redmond (2003).

b. Data for 2003-2004 taken from website of Statistical Office of Estonia.

c. 1999 survey reports 31.5 for 1995-1999 (Serbanescu, Morris and Marin, 2001).

d. Data for 1992-1995 are for the Federation of Bosnia-Herzegovina.

e. Data for Kosovo 1998-2001 are SMSO estimates; data for 2002 exclude Kosovo.

f. Data for 1997-2004 exclude Transdnestr.

g. 2000 survey reports 36.1 for 1996-2000 (NSS, MH and ORC Macro, 2001).

h. 2000 survey reports 79.0 for 1996 (SSCA and UNICEF 2000); 2001 survey reports 74.4 for 1996-2000 (Serbanescu et al., 2002).

i. Data for 1992-2004 exclude Abkhazia and Tskhinvali; 1999 survey reports 41.6 for 1995-1999 (Serbanescu et al., 2001).

j. 1999 survey reports 61.9 for 1995-1999 (APM and ORC Macro, 2000).

k. 1997 survey reports 61.3 for 1993-1997 (RIOP and ORC Macro, 1998).

l. Data for 1994-2003 are SSA estimates based on evaluation of unregistered events.

m. 1999 survey reports 79.0 for 1995-1999 (Aleshina and Redmond, 2003); 2000 survey reports 89.0 for 1993 (SSAT and UNICEF 2000).

n. 2000 survey reports 73.9 for 1996-2000 (GECRCMCH and ORC Macro, 2001).

o. 1996 survey reports 49.1 for 1992-1996 (IOG and ORC Macro, 1997).

#### 3.2 Under-5 mortality rate (per 1,000 live births)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	11.8	12.4	12.1	11.6	10.1	10.2	9.5	7.8	7.6	6.4	5.7	5.2	5.0	5.2	4.8	4.5
Hungary	18.0	16.8	17.6	16.0	14.6	13.5	12.5	12.7	11.8	11.8	10.2	10.8	9.4	8.6	8.6	7.8
Poland	22.0	22.0	20.4	19.8	18.2	17.3	15.6	14.1	11.9	11.1	10.5	9.5	9.0	8.9	8.2	7.8
Slovakia	15.8	14.1	15.4	14.7	12.7	13.2	13.1	12.2	10.7	11.3	10.1	10.2	8.2	9.1	9.7	8.6
Slovenia	10.3	10.2	10.0	10.6	8.4	8.2	6.7	6.1	6.3	6.7	5.6	5.6	4.7	4.9	4.8	4.6
Estonia <sup>b</sup>	19.0	17.2	17.5	20.8	19.9	17.4	20.1	12.5	13.0	12.6	12.6	10.7	10.9	7.5	9.0	7.6
Latvia	15.2	18.1	20.5	22.2	22.2	20.1	23.3	20.7	18.5	19.0	13.8	12.2	13.5	12.5	12.2	11.2
Lithuania	14.3	13.5	17.4	19.7	19.0	18.4	16.2	13.2	13.2	12.0	11.2	11.6	10.8	10.4	8.7	9.7
Bulgaria	18.3	18.7	21.4	20.6	19.6	20.9	19.0	19.8	23.5	18.6	17.8	15.8	17.0	16.0	14.7	14.4
Romania <sup>c</sup>	34.9	35.7	30.8	30.5	30.3	29.7	26.2	27.5	26.4	24.6	22.6	22.2	21.9	20.8	19.7	19.7
Albania <sup>d</sup>	45.5	41.5	44.5	46.9	49.7	44.7	37.0	30.6	-	-	-	19.3	17.7	15.1	14.8	13.3
Bosnia-Herzegovina	21.1	17.2	18.7	-	-	-	-	-	-	12.2	10.9	10.4	8.2	10.1	9.2	8.5
Croatia	13.7	12.5	12.6	14.0	12.0	11.8	10.4	9.3	9.5	9.5	9.1	8.6	9.2	8.4	7.4	7.2
FYR Macedonia	40.3	34.9	31.6	34.4	26.9	25.8	25.3	19.0	18.5	18.7	17.1	13.6	13.6	11.8	12.9	14.8
Serbia and Montenegro <sup>e</sup>	33.8	26.2	24.1	24.6	24.9	21.5	19.4	17.6	16.5	16.3	15.9	15.8	15.3	-	-	-
Belarus	15.4	15.8	16.2	16.0	16.2	16.8	17.4	16.5	16.0	14.5	14.9	12.2	11.6	11.0	10.0	9.2
Moldova <sup>f</sup>	27.1	25.1	25.0	24.5	27.6	28.8	27.4	26.5	25.6	22.9	23.9	23.3	20.3	18.2	17.8	15.3
Russia	22.8	22.3	23.2	23.7	26.4	23.9	23.4	22.0	21.7	20.4	21.5	19.2	18.3	16.2	15.2	14.2
Ukraine	17.6	17.3	18.5	18.7	19.9	19.6	19.9	19.4	18.9	17.3	17.5	16.0	15.2	13.5	12.6	12.1
Armenia <sup>g</sup>	27.1	23.8	22.6	24.2	24.2	21.4	19.9	19.5	19.5	18.4	19.3	19.9	18.8	16.6	13.6	13.0
Azerbaijan <sup>h</sup>	45.6	40.5	40.1	41.7	44.4	45.2	43.2	39.3	37.5	33.2	31.7	25.8	24.8	23.1	19.9	15.3
Georgia <sup>i</sup>	24.9	24.8	25.2	26.7	35.6	35.4	32.7	31.5	27.1	25.1	25.2	24.9	25.5	26.0	27.6	25.8
Kazakhstan <sup>j</sup>	33.8	34.0	35.0	33.4	36.0	35.3	36.5	33.2	32.6	28.9	27.2	25.0	24.5	21.8	19.5	17.7
Kyrgyzstan <sup>k</sup>	47.3	41.8	38.7	42.4	46.8	43.9	40.8	37.8	44.0	41.0	35.6	34.5	29.7	28.8	27.1	31.2
Tajikistan <sup>l</sup>	65.0	61.0	57.7	72.4	82.5	63.4	-	-	-	-	-	-	-	-	-	-
Turkmenistan <sup>m</sup>	77.8	64.1	64.2	60.3	67.9	70.3	66.2	61.9	53.3	48.7	33.6	27.7	25.0	22.0	18.9	16.4
Uzbekistan <sup>n</sup>	53.6	47.5	47.1	51.7	48.7	47.8	42.5	40.1	37.8	38.0	32.9	29.4	27.3	24.1	23.6	21.0

a. For sources on live births, see notes to Table 2.1; for country differences in the definition of live births, see Aleshina and Redmond (2003).

b. Data for 2003-2004 taken from website of Statistical Office of Estonia.

c. 1999 survey reports 35.0 for 1995-1999 (Serbanescu, Morris and Marin, 2001).

d. Data for 2002-2004 based on incomplete coverage.

e. Data for Kosovo 1998-2001 are SMSO estimates.

f. Data for 1997-2004 exclude Transdnestr.

g. 2000 survey reports 39.0 for 1996-2000 (NSS, MH and ORC Macro, 2001).

h. 2000 survey reports 102.0 for 1996 (SSCA and UNICEF 2000); 2001 survey reports 88.4 for 1996-2000 (Serbanescu et al., 2002).

i. Data for 1992-2004 exclude Abkhazia and Tskhinvali; 1999 survey reports 44.8 for 1995-1999 (Serbanescu et al., 2001).

j. 1999 survey reports 71.4 for 1995-1999 (APM and ORC Macro, 2000).

k. 1997 survey reports 72.3 for 1993-1997 (RIOP and ORC Macro, 1998).

l. 2000 survey reports 126.0 for 1993 (SSAT and UNICEF 2000).

m. 2000 survey reports 94.3 for 1996-2000 (GECRCMCH and ORC Macro, 2001).

n. 1996 survey reports 59.3 for 1991-1996 (CDC, 2003).

### 3.3 Maternal mortality rate (per 100,000 live births)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	9.3	8.4	13.1	9.9	11.6	6.6	2.1	5.5	2.2	5.5	6.7	5.5	3.3	3.2	4.3	5.1
Hungary	15.4	20.7	12.6	9.9	18.8	10.4	15.2	11.4	20.9	6.2	4.2	10.2	5.2	8.3	7.4	4.2
Poland	10.6	12.8	12.8	9.9	11.7	11.0	9.9	4.9	5.8	4.8	5.5	7.9	3.5	5.4	4.0	-
Slovakia	10.0	6.3	14.0	1.3	12.3	6.0	8.1	5.0	5.1	8.7	10.7	1.8	15.6	7.9	3.9	5.6
Slovenia	4.3	8.9	4.6	5.0	10.1	10.3	5.3	26.6	11.0	11.3	17.1	11.0	17.2	-	-	-
Estonia <sup>a</sup>	41.1	31.4	30.9	22.2	32.8	56.4	51.8	-	15.9	16.4	16.1	45.9	7.9	7.7	30.7	28.6
Latvia	46.2	23.7	31.8	41.2	29.9	57.7	37.0	40.4	42.5	43.5	41.2	24.7	25.4	5.0	14.3	9.8
Lithuania	28.7	22.9	19.6	20.2	12.6	16.5	17.0	12.8	15.9	16.2	13.7	8.8	12.7	20.0	3.3	16.4
Bulgaria	18.7	20.9	10.4	21.3	14.2	12.6	13.9	19.4	18.7	15.3	23.5	17.6	19.1	16.5	5.9	10.0
Romania	169.4	83.6	66.5	60.3	53.2	60.4	47.8	41.1	41.4	40.5	41.8	32.8	34.0	22.3	30.6	24.0
Albania	49.5	37.7	29.7	31.8	20.7	40.2	29.1	32.2	27.5	21.6	13.8	24.0	24.8	21.9	17.0	-
Bosnia-Herzegovina	25.4	10.5	21.6	-	-	-	-	-	-	-	9.4	5.1	2.7	8.4	2.8	2.9
Croatia	3.6	1.8	7.7	4.3	10.3	10.3	12.0	1.9	10.8	6.4	11.1	6.9	2.4	10.0	7.6	7.4
FYR Macedonia	16.7	11.3	11.5	9.0	6.2	11.9	21.8	-	3.4	3.4	7.3	13.6	14.8	10.8	3.7	12.8
Serbia and Montenegro <sup>b</sup>	16.8	11.0	13.1	8.5	17.7	13.1	12.1	7.3	13.7	9.3	5.6	5.6	6.9	-	-	-
Belarus	24.8	21.8	31.1	21.1	20.4	19.0	13.8	21.9	25.7	28.1	20.4	21.3	14.2	18.0	16.9	16.9
Moldova <sup>c</sup>	34.1	44.1	26.4	37.3	33.2	17.7	12.4	40.5	48.3	36.3	28.6	27.1	43.9	33.6	21.9	23.5
Russia	49.0	47.4	52.4	50.8	51.6	52.3	53.3	48.9	50.2	44.0	44.2	39.7	36.5	33.6	31.3	23.4
Ukraine	32.7	32.4	29.8	31.3	32.8	31.3	32.3	30.4	25.1	27.2	25.2	24.7	23.9	21.8	17.4	13.1
Armenia	34.6	40.1	23.1	14.2	27.1	29.3	34.7	20.8	38.7	25.4	32.9	52.5	21.8	9.3	22.4	26.7
Azerbaijan	28.6	9.3	10.5	17.6	34.4	43.8	37.0	44.1	31.0	41.1	43.4	37.6	25.4	19.9	18.5	25.8
Georgia <sup>d</sup>	54.9	40.9	37.0	46.8	35.7	31.4	53.2	47.3	68.5	66.0	51.3	47.1	56.7	45.1	45.5	42.4
Kazakhstan	53.3	55.0	48.1	57.2	49.4	48.4	57.6	52.9	59.0	79.1	64.8	60.3	48.8	51.9	41.9	36.6
Kyrgyzstan	42.6	62.9	55.6	49.9	44.5	42.7	44.3	31.5	62.7	33.6	42.3	45.5	43.8	53.5	49.3	50.9
Tajikistan <sup>e</sup>	38.9	41.8	53.2	69.6	74.0	74.1	50.2	66.1	51.1	54.4	44.2	43.1	45.4	45.0	37.7	39.0
Turkmenistan	55.2	42.3	45.9	58.8	44.4	46.3	48.4	39.1	-	-	-	-	-	-	-	-
Uzbekistan	42.8	34.1	33.3	30.1	24.1	17.3	18.9	12.0	10.5	9.6	14.7	34.5	33.5	26.9	29.9	30.2

a. Data for 2003-2004 taken from website of Statistical Office of Estonia.  
b. Data for Kosovo 1998-2001 are SMSO estimates.  
c. Data for 1997-2004 exclude Transnistria.  
d. Data for 1992-2004 exclude Abkhazia and Tskhinvali.  
e. 1996-2004: Ministry of Health data.

### 3.4 Mortality rate for females aged 5-14 (per 100,000 relevant population)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	18.9	17.4	17.3	19.3	16.9	19.8	21.5	14.9	15.7	15.3	16.0	15.5	13.0	12.1	11.6	12.0
Hungary	22.4	23.6	19.8	20.9	19.5	15.8	18.8	20.0	15.1	15.6	15.9	15.8	14.1	14.0	16.3	12.7
Poland	23.0	21.9	22.6	18.9	18.5	17.5	16.9	18.2	17.9	16.3	14.7	13.5	15.4	15.8	14.5	13.7
Slovakia	21.7	21.5	22.4	20.4	17.8	18.8	18.5	19.7	16.9	19.7	21.3	16.9	14.0	17.1	13.9	19.2
Slovenia	22.3	18.3	15.8	18.3	14.1	18.2	17.9	10.4	11.6	12.0	8.9	12.8	7.5	10.6	11.0	13.4
Estonia <sup>b</sup>	36.6	32.9	24.0	39.7	37.7	28.9	23.5	40.3	19.7	20.3	27.6	23.3	23.2	18.4	24.8	13.9
Latvia	40.4	36.0	43.0	32.5	33.1	38.1	39.4	24.8	29.7	28.8	22.8	25.3	21.4	25.8	17.7	15.6
Lithuania	32.8	30.6	34.8	29.5	29.5	32.2	29.0	24.6	22.4	29.0	25.1	19.9	13.6	20.2	18.4	17.3
Bulgaria	32.2	32.4	31.4	35.5	30.9	25.7	28.6	32.9	36.1	31.0	27.7	21.5	22.2	20.6	20.7	23.4
Romania	44.3	40.1	39.6	34.9	36.1	43.1	44.3	48.7	51.2	51.8	45.2	42.0	39.8	38.2	31.5	25.5
Albania	54.3	61.5	48.7	42.5	44.1	38.7	35.4	33.7	-	-	-	25.9	25.5	28.2	34.3	38.3
Bosnia-Herzegovina	21.9	18.6	16.5	-	-	-	-	-	-	15.7	11.3	11.8	11.5	12.7	9.7	9.7
Croatia	20.7	20.5	20.6	27.5	21.4	15.3	22.5	15.5	16.5	13.2	12.7	11.5	12.7	8.7	12.0	9.8
FYR Macedonia	30.7	25.2	27.0	27.1	25.9	31.0	18.1	26.4	21.6	24.4	16.2	15.1	19.8	18.2	13.8	19.9
Serbia and Montenegro <sup>c</sup>	27.6	28.0	22.7	26.1	22.1	19.5	20.5	21.1	19.6	19.2	20.0	18.9	17.8	-	-	-
Belarus	29.0	28.4	30.7	28.6	25.9	25.0	25.6	22.7	23.7	26.2	21.4	21.2	19.6	23.8	17.9	17.5
Moldova <sup>d</sup>	43.0	36.7	39.7	43.5	41.0	41.2	40.4	37.5	35.5	31.7	37.3	31.4	29.5	26.8	26.5	26.1
Russia	35.8	33.1	36.7	36.3	38.9	37.2	38.7	34.6	30.4	33.1	33.4	31.8	33.7	31.9	31.9	31.9
Ukraine	32.7	29.8	35.4	33.0	32.6	34.3	33.3	32.9	32.5	29.4	28.1	28.2	28.3	27.1	24.6	26.5
Armenia	32.1	22.0	20.6	19.8	18.4	18.0	17.6	13.4	14.0	12.9	14.2	14.9	11.0	9.3	15.4	14.2
Azerbaijan	41.4	35.8	40.4	43.4	45.7	49.0	52.7	39.6	41.5	42.7	39.8	40.6	43.0	39.2	42.2	34.1
Georgia <sup>e</sup>	28.9	26.2	28.4	26.8	-	22.4	22.9	24.8	24.0	25.1	18.2	20.7	20.9	20.7	18.3	22.3
Kazakhstan	39.4	40.4	43.8	41.7	46.1	43.7	45.4	45.9	41.7	42.2	38.9	34.7	38.9	37.4	36.8	33.6
Kyrgyzstan	47.4	45.2	40.7	41.6	37.2	43.0	41.3	41.4	41.4	41.0	34.5	38.7	27.3	33.5	30.3	25.1
Tajikistan	51.1	46.6	43.2	44.6	72.2	70.8	68.7	53.7	56.9	45.3	40.3	-	-	-	-	-
Turkmenistan	55.5	52.2	45.1	47.8	54.5	54.6	51.1	51.1	45.4	55.1	40.7	41.9	33.1	37.2	36.5	36.4
Uzbekistan	47.7	48.0	43.7	46.1	51.0	51.0	51.8	44.3	42.7	47.3	42.5	37.0	35.8	33.1	30.8	28.3

a. For population sources, see notes to Table 1.1.  
b. Data for 2003-2004 taken from website of Statistical Office of Estonia.  
c. Data for Kosovo 1998-2001 are SMSO estimates.  
d. Data for 1997-2004 exclude Transnistria.  
e. Deaths 1992-2004 exclude Abkhazia and Tskhinvali.

### 3.5 Mortality rate for males aged 5-14 (per 100,000 relevant population)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	30.1	28.0	29.0	28.3	26.7	28.4	25.2	23.7	22.9	21.5	21.4	21.5	17.1	17.7	18.5	15.7
Hungary	33.0	32.2	31.1	26.6	26.8	24.7	28.5	23.9	20.4	24.5	25.5	21.4	21.0	23.7	20.0	20.0
Poland	35.9	33.8	33.2	31.1	27.9	28.2	28.4	27.0	25.6	25.0	25.3	22.1	21.7	23.6	21.8	20.3
Slovakia	29.0	28.8	35.2	32.0	26.4	27.3	29.4	26.8	29.9	27.8	29.0	25.6	30.7	24.3	22.6	19.2
Slovenia	27.1	30.1	24.5	20.8	21.2	25.3	24.5	22.2	36.4	21.3	22.7	15.6	20.4	16.5	12.3	16.6
Estonia	67.2	69.5	57.4	60.8	54.0	54.5	65.7	45.9	57.4	41.7	31.3	38.0	41.9	32.6	29.7	22.4
Latvia	69.8	91.4	73.9	71.6	68.1	61.3	56.8	40.2	59.6	42.6	45.6	44.8	39.1	38.3	33.7	37.7
Lithuania	54.4	51.0	58.8	59.9	53.1	51.1	42.3	39.0	40.5	34.7	40.4	32.8	39.1	33.3	24.8	27.1
Bulgaria	49.8	48.3	51.6	45.7	43.7	47.2	43.9	44.7	47.5	45.5	38.6	35.8	33.3	31.4	35.1	32.2
Romania	67.3	64.1	62.9	56.7	61.2	70.4	78.2	77.3	76.5	78.2	71.8	62.5	60.0	54.8	46.4	41.2
Albania	73.2	71.6	73.1	74.0	69.0	69.2	59.2	59.3	-	-	-	49.8	52.7	49.9	54.3	64.0
Bosnia-Herzegovina	33.4	32.2	37.2	-	-	-	-	-	-	27.0	19.3	20.1	14.7	19.0	14.4	11.3
Croatia	37.8	30.8	39.9	46.5	32.5	27.3	26.0	23.9	22.6	24.5	18.6	22.3	20.8	15.9	21.7	17.0
FYR Macedonia	43.8	44.9	36.8	31.6	43.2	35.2	33.6	27.9	30.5	38.8	38.6	28.3	27.2	32.8	26.0	22.7
Serbia and Montenegro	34.8	35.9	31.4	35.5	36.9	30.6	27.9	25.7	28.5	29.8	28.0	27.5	28.1	-	-	-
Belarus	56.1	44.3	55.2	49.9	43.7	52.4	42.1	39.9	41.5	40.7	39.5	34.1	36.1	38.1	31.7	27.5
Moldova	67.1	60.3	74.2	69.9	60.0	77.1	64.3	54.7	50.7	62.1	54.1	54.2	56.7	52.1	43.2	39.3
Russia	65.4	64.2	72.9	69.3	69.6	64.0	67.4	58.6	56.0	56.0	59.5	57.0	58.0	53.1	54.3	53.8
Ukraine	55.8	55.5	60.9	55.5	56.6	55.7	55.1	50.4	47.2	48.0	46.5	46.7	49.3	45.7	41.3	40.7
Armenia	44.8	42.6	28.4	32.8	39.5	29.3	32.5	25.4	25.2	27.4	20.2	22.0	17.8	22.8	22.2	23.5
Azerbaijan	60.9	48.1	61.4	65.6	65.9	69.2	64.3	57.1	58.7	55.0	53.0	51.9	53.8	49.0	50.3	47.7
Georgia	47.0	44.8	41.6	35.5	-	38.7	39.7	34.7	35.8	35.4	35.0	34.5	39.8	39.7	15.5	39.6
Kazakhstan	69.8	77.7	80.9	75.7	77.6	74.5	72.6	73.3	64.0	66.5	60.1	61.7	59.1	57.1	53.9	54.6
Kyrgyzstan	70.4	75.0	61.9	66.3	68.6	63.4	62.5	63.2	65.1	65.9	59.6	52.0	56.4	52.9	48.7	42.8
Tajikistan	69.9	75.6	62.4	70.5	100.7	93.0	79.4	65.5	70.5	57.8	47.6	-	-	-	-	-
Turkmenistan	79.9	76.5	70.4	64.3	75.6	74.0	72.9	65.9	76.2	73.5	59.1	52.1	56.3	62.6	51.6	54.0
Uzbekistan	73.9	72.3	69.6	75.4	73.0	72.9	71.4	65.5	65.8	63.5	58.5	53.0	51.5	48.4	42.7	40.9

a. See notes to Table 3.4; for population sources, see notes to Table 1.1.

### 3.6 Mortality rate for population aged 15-19 (per 100,000 relevant population)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	50.1	57.0	62.3	59.2	59.3	57.4	62.3	53.8	53.2	51.7	49.4	50.5	47.3	47.6	43.3	44.7
Hungary	67.0	73.5	62.4	65.8	53.3	55.8	52.8	46.9	46.1	44.8	42.4	41.8	39.6	39.9	37.1	40.7
Poland	68.6	69.2	70.3	68.4	63.2	66.4	62.7	58.5	61.2	59.3	58.6	51.8	49.0	51.8	46.0	44.5
Slovakia	58.2	61.1	55.7	49.1	53.6	56.9	53.2	47.3	55.8	50.9	41.4	46.0	43.3	45.1	45.4	41.9
Slovenia	69.0	55.8	65.2	66.0	60.3	82.5	66.7	66.3	49.7	70.5	54.7	53.3	64.6	54.0	53.3	47.2
Estonia	118.3	121.0	118.4	108.3	114.1	130.7	119.5	75.7	101.7	78.6	93.8	66.3	76.2	89.6	69.2	73.7
Latvia	125.6	127.4	122.6	127.2	138.2	106.0	120.2	95.2	99.2	86.6	90.1	80.9	81.7	72.1	66.3	67.4
Lithuania	108.4	92.3	113.9	93.7	107.8	109.1	99.1	98.2	76.2	81.0	93.4	88.1	97.0	86.1	81.3	79.9
Bulgaria	66.3	77.7	67.7	73.3	71.6	76.3	68.7	65.8	71.1	61.5	62.8	61.4	56.2	45.9	49.3	45.9
Romania	79.5	74.3	66.3	65.9	65.4	66.8	64.1	67.6	67.3	63.5	64.6	62.7	53.7	49.5	52.2	58.9
Albania	61.4	58.6	84.9	76.1	73.6	78.9	83.3	77.1	-	-	-	61.9	60.6	51.1	55.0	49.8
Bosnia-Herzegovina	46.3	37.1	70.3	-	-	-	-	-	-	39.7	42.6	43.4	41.1	29.6	37.4	33.5
Croatia	55.9	59.2	110.6	115.3	85.8	63.9	74.0	69.8	58.9	59.5	59.4	53.8	52.9	49.6	51.9	46.1
FYR Macedonia	45.0	55.1	46.6	57.4	47.0	47.2	34.7	40.5	47.5	56.8	44.7	41.2	39.0	51.9	45.9	35.8
Serbia and Montenegro	51.6	56.2	64.5	70.5	57.7	49.3	46.7	50.4	50.2	47.6	48.9	45.2	41.4	-	-	-
Belarus	77.2	85.0	89.9	96.3	88.4	94.1	98.0	86.0	88.2	85.4	87.7	77.2	81.4	77.6	72.5	72.8
Moldova	97.3	86.2	86.3	107.5	97.5	92.9	86.2	78.8	78.9	80.4	75.1	72.9	62.2	66.0	49.5	62.1
Russia	110.1	113.1	116.7	126.5	144.4	146.5	161.9	146.9	130.3	132.6	138.1	145.1	132.2	125.5	121.1	117.7
Ukraine	89.3	86.7	88.7	94.8	96.5	106.1	107.5	100.5	89.8	89.4	88.9	91.7	89.4	82.3	80.7	74.1
Armenia	59.1	52.4	40.3	57.7	68.7	128.3	67.6	73.1	61.1	60.0	42.8	36.8	33.4	43.7	30.7	31.0
Azerbaijan	51.3	60.2	63.4	179.3	175.8	228.3	96.0	76.2	68.9	69.6	63.3	60.1	57.8	53.2	52.0	48.3
Georgia	61.5	62.6	64.0	80.5	-	70.0	59.7	60.4	53.1	56.5	50.9	45.8	65.3	65.3	30.2	44.4
Kazakhstan	108.9	104.8	118.8	122.9	135.3	125.3	129.0	130.4	133.4	125.7	121.9	125.6	111.8	108.8	108.6	107.8
Kyrgyzstan	81.0	85.7	79.2	91.8	83.7	78.7	90.4	80.6	77.9	84.4	76.5	69.9	72.5	71.1	70.7	60.3
Tajikistan	74.2	65.9	65.0	77.6	144.0	119.6	105.3	96.3	92.7	70.6	64.7	-	-	-	-	-
Turkmenistan	86.5	92.4	91.3	87.1	100.8	102.2	97.8	106.9	112.6	102.8	91.6	94.0	84.3	96.3	88.9	94.4
Uzbekistan	75.8	72.0	79.9	80.8	94.1	85.0	80.0	82.7	82.6	81.0	76.0	74.1	74.1	69.5	62.1	54.1

a. See notes to Table 3.4; for population sources, see notes to Table 1.1.

### 3.7 Mortality rate due to injuries for population aged 15-19 (including suicides, per 100,000 relevant population)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	31.8	37.8	41.4	42.8	41.4	40.1	45.1	40.2	38.3	35.5	37.5	35.2	32.9	34.5	31.6	31.2
Hungary	47.3	50.1	41.1	47.5	32.5	37.2	33.8	28.9	27.9	26.3	26.2	22.4	24.5	24.0	22.9	23.2
Poland	45.8	47.1	49.2	47.8	43.1	45.8	43.4	38.0	40.2	39.0	40.0	35.1	33.4	35.8	32.7	30.2
Slovakia	34.9	38.9	38.5	31.1	33.6	34.3	33.0	28.8	37.1	35.1	24.1	29.4	29.1	31.3	26.1	28.1
Slovenia	51.6	41.3	52.3	45.8	46.9	64.6	49.6	50.4	36.9	53.4	36.4	41.8	49.0	36.5	34.8	31.5
Estonia	83.1	92.6	93.5	80.0	87.0	104.0	88.4	56.5	83.6	55.7	78.1	56.7	59.0	69.8	55.2	53.2
Latvia	91.5	92.2	92.4	102.5	108.9	80.0	97.0	70.2	73.8	59.5	62.2	67.5	63.1	55.4	46.0	50.1
Lithuania	77.9	66.8	86.4	72.1	83.5	82.1	75.8	77.5	61.4	67.1	72.1	71.0	74.8	69.8	65.1	61.7
Bulgaria	37.8	44.9	35.8	42.8	42.2	45.3	40.5	38.0	32.4	30.9	36.7	32.7	29.2	24.4	28.1	22.4
Romania	43.2	42.0	37.5	34.1	36.4	37.7	34.5	37.3	37.0	36.4	37.6	38.2	30.3	28.4	27.6	30.0
Albania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31.9	25.4
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	-	-	14.9	18.6	17.6	9.9	12.9	14.1
Croatia	37.4	40.2	88.0	98.6	64.3	48.8	52.7	48.6	41.3	41.7	41.8	39.5	36.2	34.3	37.0	34.8
FYR Macedonia	17.6	18.6	22.1	21.8	20.4	17.2	14.6	17.6	19.2	25.1	26.8	18.5	16.8	22.3	22.3	17.0
Serbia and Montenegro	22.9	27.4	36.6	38.6	24.0	24.2	21.8	25.1	28.1	24.9	26.3	22.5	21.0	-	-	-
Belarus	43.0	56.4	62.9	66.2	57.7	63.8	68.8	63.1	65.1	61.1	65.7	55.5	61.3	58.4	52.9	52.2
Moldova	65.5	52.7	52.5	78.7	59.3	55.2	49.5	47.0	44.8	43.7	43.9	39.1	41.9	35.3	29.8	40.8
Russia	79.1	82.0	84.4	91.7	109.2	110.5	124.5	110.2	95.4	98.0	101.9	107.5	100.4	95.5	92.2	89.2
Ukraine	61.0	59.4	58.3	64.0	61.8	70.6	70.2	65.0	58.2	57.7	57.4	61.8	58.3	54.6	54.3	48.3
Armenia	33.8	28.9	22.6	38.1	46.0	110.1	44.8	51.8	41.2	37.7	26.1	21.4	18.3	22.8	12.9	18.5
Azerbaijan	16.4	27.3	27.4	133.7	127.4	174.7	40.0	28.1	25.3	26.7	26.0	19.2	18.4	16.1	15.0	15.2
Georgia	30.4	34.2	28.9	50.6	-	36.6	28.8	29.4	20.4	26.0	18.4	11.9	14.2	21.2	12.5	12.6
Kazakhstan	69.0	69.7	77.3	78.8	86.0	75.9	76.9	77.1	78.7	73.5	70.6	80.0	69.7	65.2	66.1	69.0
Kyrgyzstan	41.8	43.1	44.5	48.5	42.8	37.3	44.7	33.2	36.7	40.0	33.2	31.5	30.3	31.3	34.5	27.7
Tajikistan	24.8	23.6	25.2	34.7	80.6	47.8	32.2	29.4	26.6	-	-	-	-	-	-	-
Turkmenistan	38.2	46.7	44.3	41.8	40.9	41.3	37.7	40.7	45.6	40.9	37.8	34.6	30.5	39.5	31.6	38.5
Uzbekistan	24.7	32.2	37.1	31.2	33.4	26.5	24.2	27.4	26.1	27.9	26.4	27.0	26.5	24.1	20.5	19.0

a. See notes to Table 3.4; for population sources, see notes to Table 1.1.

### 3.8 Suicide rate for females aged 15-19 (per 100,000 relevant population)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	2.3	3.2	2.8	1.6	3.4	2.5	4.5	3.2	2.3	3.0	3.1	3.0	1.8	3.7	3.1	2.5
Hungary	5.7	6.8	3.0	4.8	6.1	3.6	2.2	3.1	4.3	2.3	2.9	3.0	3.7	3.8	3.8	3.2
Poland	2.5	2.9	2.5	3.0	2.4	2.9	2.9	2.8	3.2	3.0	2.6	2.7	2.4	2.6	2.3	2.7
Slovakia	2.9	2.8	2.3	1.3	3.9	1.7	2.1	0.9	2.2	2.2	1.4	1.8	1.8	1.9	0.5	1.9
Slovenia	5.7	4.2	4.2	5.5	5.5	4.1	5.4	6.8	4.2	8.5	5.8	11.8	7.6	3.1	7.9	6.4
Estonia	7.5	3.8	5.7	7.7	7.9	12.1	6.2	10.3	8.3	4.1	12.0	2.0	3.9	1.9	5.7	-
Latvia	10.1	7.9	3.5	3.6	4.9	4.9	6.2	6.2	6.2	7.2	4.7	4.6	5.6	3.3	3.3	2.2
Lithuania	5.9	4.4	11.3	6.9	4.7	11.9	6.4	6.5	4.9	9.6	11.9	15.5	4.5	8.8	5.9	10.4
Bulgaria	6.4	5.2	4.2	4.2	4.2	5.2	4.9	3.4	4.8	4.2	2.5	2.9	3.1	2.3	3.5	2.4
Romania	4.8	3.6	3.0	2.5	2.7	2.2	2.7	1.9	2.4	2.6	2.9	2.2	1.7	2.2	2.5	2.1
Albania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.2	-
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	-	-	4.3	1.4	-	2.1	1.3	2.6
Croatia	5.1	1.2	3.8	3.4	6.5	7.1	3.2	8.0	5.2	4.7	6.6	2.1	2.1	2.1	2.8	2.2
FYR Macedonia	5.3	-	3.9	-	3.8	6.3	1.2	3.7	3.7	4.9	2.4	3.7	3.7	-	5.0	1.2
Serbia and Montenegro	2.6	4.9	2.8	2.0	2.5	3.8	4.1	2.5	5.1	3.9	5.4	2.8	2.1	-	-	-
Belarus	-	2.8	3.9	4.5	4.2	4.7	4.4	4.9	6.1	5.0	6.2	3.3	3.9	3.9	3.9	4.7
Moldova	-	4.7	6.2	7.3	6.2	5.0	3.9	2.2	2.9	1.8	4.7	2.3	4.0	1.1	0.6	3.9
Russia	6.3	6.4	6.5	6.9	7.7	9.1	9.5	7.8	8.3	8.3	8.7	8.4	8.1	8.0	7.2	7.5
Ukraine	5.1	4.4	4.4	5.7	4.0	4.7	5.2	4.2	4.4	4.9	4.0	-	3.5	3.4	3.3	2.5
Armenia	-	0.7	-	-	0.7	0.6	0.6	-	-	-	-	-	-	0.6	-	-
Azerbaijan	-	0.6	0.6	0.9	0.9	0.6	-	0.3	0.9	0.3	0.3	0.5	0.5	-	1.2	0.2
Georgia	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kazakhstan	10.8	11.7	10.9	11.2	14.5	10.8	9.5	10.4	13.5	11.3	9.7	11.8	9.0	10.5	8.9	12.1
Kyrgyzstan	5.4	7.3	10.0	7.5	4.5	2.2	11.2	2.6	5.0	5.4	4.4	5.5	4.5	4.8	5.3	4.2
Tajikistan	4.9	5.6	7.0	4.7	2.5	1.4	2.1	1.4	0.7	2.2	1.2	-	-	-	-	-
Turkmenistan	5.5	7.9	8.1	5.9	5.2	5.9	1.8	3.9	10.3	8.8	7.7	6.3	6.4	8.0	4.9	6.5
Uzbekistan	-	6.8	6.6	6.3	5.1	4.2	3.0	4.9	5.0	6.1	5.7	6.4	5.5	5.1	4.7	2.7

a. See notes to Table 3.4; for population sources, see notes to Table 1.1.

### 3.9 Suicide rate for males aged 15-19 (per 100,000 relevant population)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	9.1	8.6	12.9	11.5	10.3	13.1	16.2	13.6	14.1	10.6	12.8	9.1	9.5	9.3	9.7	10.4
Hungary	16.5	12.6	13.7	18.5	13.2	16.1	15.3	13.0	10.5	11.3	12.9	10.4	10.1	11.2	8.9	12.3
Poland	10.6	10.4	11.6	11.4	13.4	13.8	14.2	14.5	14.4	14.4	17.7	14.1	14.2	14.6	14.6	14.6
Slovakia	8.5	8.6	11.9	6.8	8.8	12.0	11.1	10.0	7.6	12.0	8.2	6.6	5.7	6.3	7.3	9.3
Slovenia	12.3	9.4	10.6	13.2	26.1	23.3	19.3	18.0	16.9	30.6	15.0	12.7	11.6	11.9	12.1	10.8
Estonia	33.0	23.2	23.6	18.5	28.5	27.2	23.6	19.7	21.6	23.4	36.4	24.5	22.4	24.1	16.5	23.7
Latvia	17.8	18.9	23.9	36.7	31.8	28.7	25.2	25.2	20.2	23.1	16.8	21.9	14.0	12.7	10.5	12.7
Lithuania	18.8	14.3	24.2	21.8	24.5	27.9	32.7	30.6	37.7	23.3	35.8	27.6	36.4	38.4	29.0	28.5
Bulgaria	10.7	11.4	10.8	13.9	16.0	12.3	13.4	12.4	13.0	10.7	8.9	4.9	6.6	9.2	5.9	3.7
Romania	6.4	7.3	5.5	7.3	7.1	6.2	7.8	7.8	7.2	5.7	7.7	8.5	7.5	6.9	5.5	7.7
Albania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.1	-
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	-	-	9.1	6.2	4.8	2.7	3.2	1.9
Croatia	7.3	9.5	12.6	23.0	17.2	14.8	14.7	20.4	15.6	17.2	20.1	14.4	13.1	14.0	13.6	9.0
FYR Macedonia	2.6	2.5	6.2	3.7	3.6	1.2	1.2	1.2	2.3	3.5	5.8	1.2	2.3	2.4	1.2	3.5
Serbia and Montenegro	5.4	5.8	5.1	7.3	6.8	5.3	8.5	9.7	8.1	5.4	7.6	8.4	6.9	-	-	-
Belarus	-	11.5	13.7	19.7	14.7	19.4	23.8	19.3	20.0	22.2	20.5	20.9	23.6	24.3	22.5	24.0
Moldova	-	7.5	11.9	10.0	16.4	15.2	10.8	9.1	13.7	5.5	8.9	8.0	8.3	7.0	7.0	13.0
Russia	18.5	23.4	24.1	25.2	31.7	34.7	35.9	34.5	34.2	33.0	33.4	35.7	37.9	36.8	34.0	32.4
Ukraine	11.9	12.1	12.4	12.6	16.4	17.7	18.1	16.7	16.3	17.1	17.0	-	18.3	14.7	16.5	15.8
Armenia	4.8	4.0	2.6	1.9	2.5	1.2	1.2	1.2	1.1	1.1	1.6	1.6	1.0	1.3	-	0.6
Azerbaijan	-	2.6	2.6	3.5	2.9	0.6	1.1	0.8	0.8	-	0.3	1.0	0.9	1.1	1.5	0.6
Georgia	3.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kazakhstan	21.6	21.5	25.3	30.1	34.8	28.6	30.9	33.5	35.9	29.5	32.1	33.8	30.0	31.2	30.0	31.8
Kyrgyzstan	12.8	10.7	10.5	14.4	14.5	12.5	15.4	9.7	10.8	14.6	14.3	11.2	18.7	15.2	11.3	8.6
Tajikistan	2.6	2.2	4.0	5.0	2.9	3.6	5.3	2.1	3.3	0.9	4.5	-	-	-	-	-
Turkmenistan	7.4	12.8	13.4	16.7	14.3	10.7	12.1	14.8	20.0	16.6	17.7	17.9	8.8	15.5	11.2	13.5
Uzbekistan	-	8.2	9.9	11.7	9.9	8.6	7.7	7.5	10.2	8.7	11.3	12.5	11.4	10.1	6.7	7.0

a. See notes to Table 3.4; for population sources, see notes to Table 1.1.

## 4. Health

### 4.1 Births attended by skilled birth personnel (per cent of all births)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.9	99.9	99.9	99.9	99.9	99.9
Hungary	99.4	99.4	99.4	99.5	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.6
Poland	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8
Slovakia	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	99.4	99.5	99.5
Slovenia	99.6	99.6	99.6	99.5	99.7	99.7	99.7	99.8	99.7	99.8	99.8	99.9	99.9	99.8	99.9	99.8
Estonia	99.0	-	-	99.0	99.1	99.3	99.5	99.6	99.5	99.6	99.6	99.7	99.7	99.6	-	-
Latvia	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	100.0	99.0	100.0
Lithuania	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Bulgaria	99.3	99.1	99.5	99.8	99.0	99.0	98.9	99.9	99.9	99.9	99.0	99.8	98.9	99.2	99.2	99.4
Romania	99.9	99.8	99.9	99.7	98.9	99.0	99.1	99.0	98.3	99.0	99.0	99.0	96.5	98.5	98.7	98.7
Albania <sup>a</sup>	92.7	93.0	92.6	86.4	87.2	89.1	89.1	91.2	98.8	99.1	99.0	99.1	99.0	90.3	98.8	99.3
Bosnia-Herzegovina <sup>b</sup>	96.6	97.0	-	-	-	-	-	98.9	99.1	99.5	99.7	99.7	99.8	99.8	99.7	99.9
Croatia	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
FYR Macedonia	87.8	88.9	89.3	90.9	93.3	93.4	94.1	95.0	95.6	96.6	97.0	97.7	97.6	98.2	99.0	99.0
Serbia and Montenegro <sup>c</sup>	90.3	90.6	89.1	90.2	90.4	90.3	91.7	92.6	92.8	92.7	92.3	92.3	92.6	-	-	-
Belarus	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
Moldova <sup>d</sup>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	98.0	99.0	99.6	99.4	99.3
Russia	99.2	99.2	99.2	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.2	99.3	99.3	99.4	99.3
Ukraine	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
Armenia <sup>e</sup>	99.7	99.7	99.7	98.3	95.5	93.3	93.1	95.7	96.4	97.4	98.8	97.8	98.4	98.8	99.2	99.5
Azerbaijan <sup>f</sup>	97.3	97.3	97.2	96.5	96.3	99.6	99.7	99.7	99.8	99.8	99.7	99.6	99.6	99.7	99.7	99.7
Georgia	94.6	96.6	91.3	91.1	90.8	-	-	-	-	96.0	96.9	95.7	96.7	97.4	99.0	99.7
Kazakhstan <sup>g</sup>	99.0	99.0	98.1	98.9	98.6	98.3	98.1	98.1	97.6	98.0	97.8	98.3	98.5	98.9	99.4	99.4
Kyrgyzstan <sup>h</sup>	98.8	98.9	98.9	98.7	98.3	98.2	98.0	98.1	98.4	98.5	98.5	98.6	98.7	98.8	98.9	98.2
Tajikistan	93.6	-	90.3	-	-	82.6	80.9	79.0	72.6	74.1	66.6	76.9	81.1	88.7	88.1	75.1
Turkmenistan <sup>i</sup>	-	-	-	-	-	-	-	-	-	-	-	97.2	99.5	98.5	-	-
Uzbekistani	-	-	-	-	-	-	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

a. 2000 survey reports 99.1 (INSTAT Albania and UNICEF 2000).  
b. Data for 1996-2004 are unweighted average for Federation of B-H and Republika Srpska.  
c. Data for Kosovo 1998-2001 are SMSO estimates.  
d. Data since 2001 exclude Transdnestr.  
e. 2000 survey reports 96.8 for 1996-2000 (NSS, MH and ORC Macro, 2001).  
f. 2000 survey reports 87.5 (SSCA and UNICEF 2000).  
g. 1999 survey reports 99.1 for 1995-1999 (APM and ORC Macro, 2000).  
h. 1997 survey reports 98.1 for 1993-1997 (RIOP and ORC Macro, 1998).  
i. 2000 survey reports 97.2 for 1996-2000 (GECRCMCH and ORC Macro, 2001).  
j. 2000 survey reports 95.6 (SDSU and UNICEF 2000).

### 4.2 DTP immunization rate (per cent of children under 2 immunized against diphtheria, tetanus and pertussis)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	99.0	99.0	99.0	99.0	99.0	98.0	96.0	97.0	98.0	98.0	98.0	98.4	99.2	99.2	98.6	99.4
Hungary	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.8	99.8	99.9	99.6	99.8	99.9	99.9	99.9	99.9
Poland	95.6	95.5	94.2	94.3	94.6	95.1	95.6	96.6	97.5	97.9	97.6	98.1	98.2	98.6	98.5	98.7
Slovakia	99.1	99.4	99.7	99.3	99.1	98.9	99.1	-	-	-	-	-	-	-	-	-
Slovenia	97.4	97.1	97.3	97.8	98.1	98.1	95.8	96.2	91.9	89.5	91.9	91.2	92.3	93.1	87.7	94.2
Estonia <sup>a,b</sup>	69.3	67.2	71.3	69.6	71.0	77.0	81.6	86.8	86.6	88.4	91.0	92.0	93.5	94.2	94.5	94.3
Latvia <sup>a</sup>	81.1	83.5	82.8	83.5	78.8	72.4	71.8	73.7	88.0	88.3	89.0	93.4	93.9	95.5	94.6	95.4
Lithuania	81.9	78.4	74.9	87.2	86.8	87.2	97.3	92.1	92.0	93.5	93.1	93.6	94.7	94.8	94.2	94.0
Bulgaria	99.5	99.5	99.4	97.9	97.7	93.3	94.8	95.1	94.2	95.1	96.0	93.3	93.6	92.8	95.8	94.8
Romania	79.3	75.5	77.3	86.8	97.6	97.6	98.3	98.0	96.7	97.5	97.3	96.1	96.5	96.8	97.0	97.2
Albania <sup>c</sup>	-	-	77.6	94.0	95.8	96.3	97.1	98.1	98.6	96.0	97.0	95.5	97.0	96.0	97.0	97.5
Bosnia-Herzegovina <sup>d</sup>	-	93.0	-	-	-	-	-	82.0	83.0	84.0	84.0	90.0	91.0	90.0	94.0	-
Croatia	86.0	88.0	85.0	83.0	85.0	87.0	90.0	91.0	92.0	93.0	93.0	93.0	94.0	95.0	94.0	96.0
FYR Macedonia	93.7	94.4	92.5	95.4	89.6	87.7	95.2	92.5	96.6	93.6	95.0	95.1	90.6	95.6	95.8	93.8
Serbia and Montenegro <sup>e</sup>	89.2	84.0	79.0	84.2	84.6	85.0	89.0	91.2	94.0	89.2	88.7	88.8	96.7	94.9	89.0	97.0
Belarus	93.8	92.4	87.7	88.1	89.4	89.5	93.9	97.7	96.7	98.6	98.7	99.1	99.2	98.9	98.9	99.0
Moldova <sup>f</sup>	84.3	81.0	80.7	83.5	69.5	85.7	95.5	96.8	97.1	96.9	97.0	94.5	95.6	98.1	98.3	97.2
Russia <sup>g,h</sup>	82.7	68.5	68.7	72.6	79.2	88.1	92.7	95.1	87.5	91.3	95.0	95.6	95.8	96.6	96.3	97.4
Ukraine <sup>h</sup>	79.2	78.8	86.0	88.1	93.1	97.0	97.7	98.6	98.5	98.7	98.4	98.8	99.1	98.8	99.0	99.2
Armenia <sup>a,g,i</sup>	83.7	85.3	83.0	85.2	85.3	86.0	98.0	86.0	88.1	90.3	91.1	93.3	94.5	93.4	93.8	93.5
Azerbaijan <sup>g</sup>	90.8	92.1	92.2	82.0	89.5	94.0	95.9	95.8	94.5	97.4	98.8	98.4	98.2	97.4	96.5	96.3
Georgia <sup>j,k</sup>	82.1	41.4	73.8	54.1	53.2	100.0	52.0	97.3	99.3	86.7	89.2	97.6	89.3	86.8	91.0	93.5
Kazakhstan <sup>l</sup>	84.8	84.2	82.7	85.3	81.6	84.4	92.9	95.0	99.0	98.0	98.2	98.5	99.6	99.2	99.4	81.6
Kyrgyzstan <sup>h,m</sup>	-	-	78.1	88.5	64.4	85.3	93.1	97.7	98.1	97.4	99.2	98.7	98.9	98.4	98.2	99.3
Tajikistan <sup>n</sup>	-	-	-	-	-	78.8	-	-	-	97.2	98.7	99.4	100.0	97.0	96.3	95.7
Turkmenistan <sup>a,g,o</sup>	78.4	82.2	80.9	84.1	72.8	89.7	92.6	93.6	98.6	99.2	99.0	98.9	98.7	98.9	83.3	98.2
Uzbekistan <sup>g,h,p</sup>	-	87.1	84.1	83.3	49.2	66.7	85.1	95.7	96.6	98.4	98.8	99.1	99.1	98.8	98.3	98.8

a. Diphtheria and tetanus.  
b. European health for all database (2006).  
c. 2000 survey reports 51.7 (INSTAT Albania and UNICEF 2000).  
d. Data for 1996-2003 refer to Republika Srpska; 2000 survey reports 87.7 (BHAS and UNICEF 2000).  
e. Data for Kosovo 1998-2001 are SMSO estimates. 2002-2004: European health for all database (2006).  
f. Data since 2001 exclude Transdnestr. 2000 survey reports 93.8 among children 15-26 months aged (NCPMM and UNICEF 2000).  
g. Children under 1 year.  
h. Diphtheria.  
i. 2000 survey reports 95.1 (NSS, MH and ORC Macro, 2001).  
j. Total vaccinations of children of all ages divided by population aged 0-1; data for 1992-2004 exclude Abkhazia and Tskhinvali.  
k. 1996 survey reports 75.0 for children aged 0-5 and 40.0 for children aged 0-1 (MOHG and UNICEF 1996).  
l. Data for 1989-1998 refer to diphtheria only. 1999 survey reports 97.7 (APM and ORC Macro, 2000).  
m. 1995 survey reports 74.0 (MOHK and UNICEF 1995); 1997 survey reports 95.3 (RIOP and ORC Macro, 1998).  
n. 2000 survey reports 76.0 (SSAT and UNICEF 2000).  
o. 1995 survey reports 80.0 (MOHT and UNICEF 1995); 2000 survey reports 97.9 (GECRCMCH and ORC Macro, 2001).  
p. 2000 survey reports 95.7 (SDSU and UNICEF 2000).

### 4.3 Polio immunization rate (per cent of children under 2 immunized)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	99.0	99.0	99.0	99.0	99.0	98.0	98.0	98.0	97.0	97.0	97.0	97.4	97.2	97.2	96.7	96.4
Hungary	98.5	98.6	98.6	98.6	99.9	99.9	99.9	99.8	99.7	99.9	99.7	99.8	99.9	99.9	99.9	99.9
Poland	95.7	95.7	94.4	94.5	95.0	95.5	95.8	96.8	97.7	98.1	97.6	98.2	97.7	97.9	97.9	98.5
Slovakia <sup>a</sup>	98.8	99.0	99.2	98.6	98.6	98.6	98.6	98.0	98.0	98.0	98.4	98.3	98.9	98.4	97.7	99.0
Slovenia	96.5	96.8	97.6	98.3	98.5	98.5	96.8	97.2	91.0	90.2	93.3	93.0	92.6	93.2	87.6	94.2
Estonia <sup>b</sup>	69.9	68.2	84.3	83.8	84.0	87.0	87.0	93.0	94.0	94.0	91.2	92.5	97.0	94.2	94.6	95.1
Latvia	83.6	85.6	84.1	94.9	80.9	59.3	76.3	73.7	87.9	88.2	89.4	93.3	94.0	95.6	94.6	94.6
Lithuania	86.6	77.1	79.0	88.2	86.3	87.7	89.3	92.6	94.8	96.6	96.9	96.9	97.5	97.0	97.0	96.4
Bulgaria	99.7	99.7	99.0	98.8	97.0	93.9	96.8	95.4	95.9	96.5	97.2	94.4	94.3	93.6	96.0	94.1
Romania	89.4	80.5	83.5	92.3	90.7	91.0	94.2	96.8	97.1	97.6	97.4	96.3	96.7	97.0	97.5	97.2
Albania <sup>c</sup>	-	-	82.5	87.0	97.5	97.2	97.8	99.6	99.1	97.0	97.0	96.0	96.0	96.0	97.0	98.0
Bosnia-Herzegovina <sup>d</sup>	-	94.0	-	-	-	-	-	82.0	83.0	84.0	84.0	90.0	91.0	93.0	97.0	-
Croatia	85.0	87.0	85.0	85.0	86.0	87.0	90.0	91.0	92.0	93.0	93.0	94.0	94.0	95.0	95.0	95.0
FYR Macedonia <sup>e</sup>	94.4	94.3	93.5	93.8	93.7	90.7	94.7	94.4	97.4	94.3	95.4	96.0	91.5	96.7	95.9	94.7
Serbia and Montenegro <sup>f</sup>	88.8	80.7	80.5	84.5	82.6	84.4	89.6	91.1	94.0	89.1	88.8	87.3	96.6	94.8	89.1	96.5
Belarus	90.4	89.8	89.4	89.9	90.5	92.4	96.1	97.9	98.3	98.6	98.8	99.2	99.2	99.1	99.0	99.1
Moldova <sup>g</sup>	91.6	91.1	89.3	92.8	91.8	94.2	97.1	98.6	98.4	97.6	98.2	97.6	98.4	98.5	98.6	98.2
Russia	68.6	69.4	71.5	69.0	82.2	87.5	91.6	96.8	91.4	94.3	97.1	96.8	96.7	97.1	96.9	98.0
Ukraine	80.5	81.3	86.3	90.1	91.1	96.3	97.5	98.9	98.2	98.7	98.0	97.8	99.0	99.0	99.1	99.1
Armenia <sup>h</sup>	90.3	91.9	91.8	91.9	91.9	92.0	93.0	97.0	97.0	96.4	96.7	96.2	96.8	95.8	93.8	93.0
Azerbaijan <sup>i</sup>	96.8	95.7	97.5	96.2	94.2	93.6	98.0	97.3	98.3	98.1	99.7	98.5	95.8	99.1	97.5	97.3
Georgia <sup>j</sup>	98.0	47.4	100.0	67.3	83.9	100.0	63.0	99.3	100.0	100.0	95.0	93.6	82.8	100.0	91.0	92.1
Kazakhstan <sup>k</sup>	85.6	85.0	83.7	86.5	68.7	57.9	93.1	94.2	97.0	-	99.7	98.6	100.5	100.7	100.1	99.2
Kyrgyzstan <sup>l</sup>	-	-	80.9	91.5	69.4	84.6	96.3	94.2	99.1	97.4	99.2	98.7	98.8	98.6	98.1	98.4
Tajikistan <sup>m</sup>	-	-	-	90.1	-	-	-	93.0	-	97.1	98.6	90.3	93.2	97.1	96.3	95.6
Turkmenistan <sup>n</sup>	83.7	92.2	91.1	90.9	91.8	94.4	96.7	95.6	99.2	99.7	98.7	99.2	99.3	99.3	66.0	97.8
Uzbekistan <sup>o</sup>	-	90.0	89.1	85.3	45.9	79.0	98.2	96.6	97.9	99.0	99.0	99.5	99.4	99.4	98.9	99.1

a. 1996-2004: European health for all database (2006).  
b. European health for all database (2006).  
c. 2000 survey reports 28.7 (INSTAT Albania and UNICEF 2000).  
d. Data for 1996-2003 refer to Republika Srpska; 2000 survey reports 85.2 (BHAS and UNICEF 2000).  
e. Children under 1 year.  
f. Data for Kosovo 1998-2001 are SMSO estimates. 2002-2004: European health for all database (2006).  
g. Data since 2001 exclude Transdnestr. 2000 survey reports 94.8 for children aged 15-26 months (NCPMM and UNICEF 2000).  
h. 2000 survey reports 97.6 (NSS, MH and ORC Macro, 2001). Children under 1 year for 1989-2000.  
i. Total vaccinations of children of all ages divided by population aged 0-1; data for 1992-2004 exclude Abkhazia and Tskhinvali.  
j. 1996 survey reports 77.0 and 41.0 for children aged 0-5 and 0-1 years respectively (MOHG and UNICEF, 1996).  
k. Children 0-4 days since 1997. 1999 survey reports 91.6 (APM and ORC Macro, 2000).  
l. 1995 survey reports 67.0 (MOHK and UNICEF, 1995); 1997 survey reports 94.8 (RIOP and ORC Macro, 1998).  
m. 2000 survey reports 78.0 (SSAT and UNICEF 2000).  
n. 1995 survey reports 83.0 (MOHT and UNICEF, 1995); 2000 survey reports 97.1 (GECRCMCH and ORC Macro, 2001).  
o. 2000 survey reports 95.7 (SDSU and UNICEF 2000).

### 4.4 Measles immunization rate (per cent of children under 2 who have been immunized)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	99.0	98.0	98.0	97.0	98.0	97.0	96.0	97.0	96.0	96.0	95.0	97.1	97.4	97.4	96.7	96.9
Hungary	99.9	99.7	99.9	99.8	99.8	99.8	99.9	99.8	99.8	99.6	99.7	99.6	99.6	99.7	99.7	99.8
Poland <sup>a</sup>	94.9	94.6	93.5	94.9	95.3	95.6	96.1	96.7	96.9	97.1	97.0	97.4	97.2	97.6	97.5	97.4
Slovakia <sup>b</sup>	98.9	98.5	98.0	96.2	97.9	97.8	97.4	99.0	99.0	99.0	98.0	98.0	98.6	98.6	98.6	98.0
Slovenia	90.8	92.3	90.6	90.3	89.7	91.1	92.6	91.6	94.7	91.6	96.3	95.2	94.0	93.5	86.7	95.1
Estonia <sup>c</sup>	86.2	82.0	78.0	75.0	74.0	76.0	81.0	86.0	88.0	89.0	92.0	93.0	94.7	95.2	95.2	95.5
Latvia <sup>d</sup>	89.4	89.1	89.4	68.4	78.7	66.4	75.5	78.6	79.7	79.0	95.3	96.3	96.3	95.1	96.6	95.9
Lithuania <sup>e</sup>	92.2	98.0	85.7	98.0	91.8	92.7	93.7	96.3	95.9	96.5	96.9	97.0	97.4	97.9	97.7	97.7
Bulgaria <sup>f</sup>	99.6	99.6	97.8	92.2	87.9	93.3	96.4	95.1	93.8	85.2	94.5	82.7	85.5	79.2	95.5	94.7
Romania	86.2	93.0	87.6	90.8	90.2	90.1	93.3	93.8	97.3	97.2	98.2	94.8	97.8	97.1	97.0	97.4
Albania <sup>g</sup>	-	-	80.5	87.0	76.2	81.2	91.0	91.7	95.1	89.0	91.0	92.0	95.0	95.0	94.0	95.7
Bosnia-Herzegovina <sup>h</sup>	-	-	-	-	-	-	-	65.0	65.0	68.0	66.0	68.0	90.0	95.0	96.0	-
Croatia	95.0	91.0	89.0	90.0	90.0	90.0	92.0	92.0	91.0	91.0	92.0	93.0	94.0	95.0	94.0	96.0
FYR Macedonia	93.7	93.6	92.8	52.9	97.8	86.0	96.7	91.0	97.8	96.3	98.4	97.1	92.2	97.8	96.3	96.4
Serbia and Montenegro <sup>i</sup>	90.7	83.0	75.5	81.8	84.9	80.8	86.0	90.1	91.9	89.3	86.4	83.1	94.8	92.3	87.2	95.7
Belarus	96.7	96.2	94.9	93.7	95.6	96.6	92.8	96.4	97.6	98.0	98.4	98.2	98.9	99.0	98.8	99.0
Moldova <sup>j</sup>	94.1	93.8	92.7	91.8	92.4	94.9	98.0	98.4	98.9	99.2	98.8	99.2	99.4	99.1	99.4	96.3
Russia	82.0	81.1	78.7	82.6	88.2	91.3	94.1	95.3	91.1	94.2	96.9	96.7	97.1	97.9	97.7	98.4
Ukraine	87.9	88.7	60.9	90.3	94.3	95.5	97.1	92.4	97.8	97.4	98.5	98.8	98.8	98.9	99.0	99.2
Armenia <sup>k</sup>	91.9	95.2	80.7	77.4	95.2	95.0	96.0	89.0	91.5	93.5	91.1	91.6	95.6	78.3	93.8	91.5
Azerbaijan	87.6	83.3	70.1	66.3	27.8	91.3	97.0	98.5	96.6	97.7	98.0	98.1	98.9	98.8	97.2	94.5
Georgia <sup>l</sup>	82.0	42.0	76.3	16.1	65.5	91.9	50.8	97.0	100.0	100.0	95.0	94.8	100.9	93.7	99.0	93.5
Kazakhstan <sup>m</sup>	93.0	95.1	91.4	90.2	91.0	71.7	95.4	96.6	97.0	-	99.6	99.0	100.1	98.9	99.6	100.0
Kyrgyzstan <sup>n</sup>	-	-	94.1	94.0	93.0	88.6	97.1	98.0	98.0	98.0	97.5	97.8	98.9	98.0	99.7	99.3
Tajikistan	-	-	-	72.6	-	-	89.5	90.0	97.8	97.2	91.6	98.9	90.8	96.5	97.2	97.5
Turkmenistan <sup>o</sup>	67.0	79.6	62.6	76.0	85.1	90.2	91.9	93.8	99.6	98.7	98.0	99.0	97.8	98.1	97.1	97.3
Uzbekistan <sup>p</sup>	-	85.1	84.1	82.2	82.2	71.1	80.5	93.5	89.3	87.7	95.5	98.9	98.9	96.8	98.6	98.3

a. Children under 3 years.  
b. 1996-2004: European health for all database (2006).  
c. European health for all database (2006).  
d. Children under 3 years since 1999.  
e. Combined vaccine with parotitis and rubella.  
f. 2000 survey reports 61.1 (INSTAT Albania and UNICEF 2000).  
g. Data for 1996-2003 refer to Republika Srpska; 2000 survey reports 64.4 (BHAS and UNICEF 2000).  
h. 1989, 1990: combined vaccine with parotitis and rubella. Data for Kosovo 1998-2001 are SMSO estimates. 2002-2004: European health for all database (2006).  
i. Data since 2001 exclude Transdnestr. 2000 survey reports 91.1 for children aged 15-26 months (NCPMM and UNICEF 2000).  
j. 2000 survey reports 78.8 (NSS, MH and ORC Macro, 2001).  
k. Total vaccinations of children of all ages divided by population 0-1; data for 1992-2004 exclude Abkhazia and Tskhinvali; 1996 survey reports 51.0 for children aged 0-5 years (MOHG and UNICEF, 1996).  
l. 1999 survey reports 86.5 (APM and ORC Macro, 2000).  
m. 1995 survey reports 74.0 (MOHK and UNICEF, 1995); 1997 survey reports 85.4 (RIOP and ORC Macro, 1998).  
n. 1995 survey reports 66.0 (MOHT and UNICEF, 1995); 2000 survey reports 92.9 (GECRCMCH and ORC Macro, 2001).  
o. 2000 survey reports 97.0 (SDSU and UNICEF 2000).

#### 4.5 Tuberculosis immunization rate (per cent of children under 1 immunized)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	99.1	99.2	99.3	99.2	99.2	99.3	99.0	99.3	97.0	98.0	98.0	98.5	98.5	98.0	98.5	98.6
Hungary	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Poland	95.0	96.9	94.0	94.5	95.2	93.8	98.1	96.9	96.4	96.0	95.8	95.5	94.9	95.1	93.5	94.1
Slovakia	100.0	100.0	94.5	98.2	98.1	98.3	98.1	97.0	95.4	94.9	98.2	95.8	88.7	96.2	98.3	95.0
Slovenia	94.3	94.3	80.5	84.0	99.3	98.6	97.1	96.2	97.2	97.6	96.9	97.5	96.7	97.2	97.2	96.3
Estonia <sup>a</sup>	-	-	-	-	97.5	97.9	98.2	98.4	99.0	99.0	99.0	99.4	99.3	98.4	99.6	99.1
Latvia	97.9	94.8	88.6	92.7	90.9	94.6	99.7	95.5	95.6	94.1	93.1	97.3	96.5	97.9	96.7	97.2
Lithuania	93.3	93.9	87.4	93.9	97.6	95.9	96.6	98.3	98.4	99.1	99.3	99.0	99.3	99.3	99.4	98.9
Bulgaria	99.9	99.9	99.6	99.0	99.3	97.9	98.6	97.8	92.2	98.4	98.7	98.4	97.8	98.0	97.9	97.8
Romania	96.0	96.1	99.1	99.3	99.1	99.2	99.7	99.7	99.8	99.8	99.9	99.8	99.6	99.5	99.6	98.9
Albania <sup>b</sup>	-	-	-	-	82.4	81.2	96.7	94.3	93.7	87.0	83.0	85.0	91.0	91.0	95.0	97.5
Bosnia-Herzegovina <sup>c</sup>	-	91.1	-	-	-	-	-	98.0	98.0	99.0	99.0	99.0	99.0	90.0	98.0	-
Croatia	97.0	97.0	97.0	92.0	98.0	98.0	98.0	99.0	98.0	97.0	96.0	98.0	97.0	98.0	98.0	98.0
FYR Macedonia	93.0	93.0	98.0	87.0	95.0	90.0	95.0	97.3	95.6	90.2	92.7	92.4	96.8	90.8	94.0	98.1
Serbia and Montenegro <sup>d</sup>	86.7	78.6	81.8	76.7	68.0	70.8	70.9	83.9	78.2	97.2	98.8	98.0	98.2	95.0	74.1	97.0
Belarus	92.1	90.6	94.3	94.5	93.3	93.7	96.2	97.5	98.2	98.8	99.2	99.2	99.3	99.2	99.2	99.2
Moldova <sup>e</sup>	89.0	96.0	98.3	96.0	96.4	94.8	97.3	98.4	99.4	99.3	98.5	99.0	99.0	99.1	99.3	99.7
Russia	93.8	91.6	88.3	86.2	81.6	92.1	91.6	93.0	93.5	95.3	95.8	96.2	96.6	97.2	96.8	96.1
Ukraine	-	-	-	-	89.4	91.7	94.1	96.9	97.1	97.4	97.5	97.9	98.1	97.8	98.1	98.2
Armenia <sup>f</sup>	82.6	83.5	85.6	88.2	83.5	83.0	84.0	82.0	72.3	94.9	93.6	96.8	96.4	97.1	92.1	95.8
Azerbaijan	80.6	89.6	53.2	55.0	18.6	50.1	93.0	90.0	93.6	96.4	98.7	97.9	98.5	99.1	98.5	98.6
Georgia <sup>g</sup>	88.2	40.3	69.5	60.9	26.8	91.2	33.6	82.9	81.8	82.3	94.2	95.6	96.4	80.2	85.0	77.6
Kazakhstan <sup>h</sup>	82.6	90.8	97.9	98.1	95.2	98.1	97.2	98.2	96.0	-	102.3	103.1	104.0	105.6	106.9	102.8
Kyrgyzstan <sup>i</sup>	-	-	96.8	96.5	95.0	97.4	96.4	99.8	97.1	94.4	98.9	97.8	98.8	99.1	98.9	98.5
Tajikistan <sup>j</sup>	-	-	-	69.9	-	86.3	-	99.0	-	93.0	94.9	89.5	92.6	97.7	90.8	94.0
Turkmenistan <sup>k</sup>	-	-	-	-	94.0	95.9	96.5	96.5	96.6	98.2	98.1	99.0	98.2	98.4	98.8	99.1
Uzbekistan <sup>l</sup>	-	-	88.5	89.7	91.6	92.5	95.1	95.5	96.9	96.8	98.0	98.1	97.9	98.1	98.3	98.8

a. 2003-2004: European health for all database (2006).  
b. A 2000 survey on BCG estimates 79.6% among children 12-23 months old (Albania, MICS 2000).  
c. 1996-2003: refers to Republika Srpska. A 2000 survey on BCG estimates 95.2% among children 12-23 months old (B-H, MICS 2000).  
d. 1997-2004: European health for all database (2006).  
e. Data since 2001 exclude Transdniestra. A 2000 survey on BCG estimates 99.2% among children 15-26 months old (Moldova, MICS 2000).  
f. A 2000 survey (DHS) on BCG estimates 96.0% among children 12-23 months old (NSS, MH and ORC Macro, 2001).  
g. 1992-2004: excludes Abkhazia and Tskhinvali. In 1993 and 1995 was a lack of vaccine.  
h. A 1999 survey (DHS) on BCG estimates 99.1% among children 12-23 months old (APM and ORC Macro, 2000).  
i. A 1997 survey (DHS) on BCG estimates 98.5% among children 12-23 months old (RIOP and ORC Macro, 1998).  
j. A 2000 survey on BCG estimates 89% among children 12-23 months old (Tajikistan, MICS 2000).  
k. A 2000 survey (DHS) on BCG estimates 99.1% among children 12-23 months old (Georgmch and ORC Macro, 2001).  
l. A 2000 survey on BCG estimates 98.9% among children 12-23 months old (Uzbekistan, MICS 2000).

#### 4.6 Incidence of tuberculosis (as new cases per 100,000 population)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	19.2	18.7	20.2	19.2	18.0	19.0	17.8	18.8	17.8	17.5	15.9	14.0	13.2	11.8	11.4	10.3
Hungary	36.0	34.6	35.3	38.2	40.6	40.2	42.0	41.5	40.3	39.0	38.2	35.2	32.6	29.6	27.1	24.5
Poland	42.6	42.3	43.1	43.1	43.8	43.2	41.3	39.8	36.1	34.4	31.5	29.8	27.9	27.4	26.5	24.9
Slovakia <sup>b</sup>	27.2	26.3	29.9	32.6	33.7	32.9	28.7	28.0	27.9	23.9	22.5	20.6	20.0	19.6	18.3	12.3
Slovenia <sup>c</sup>	38.4	36.1	30.9	34.1	32.5	26.4	26.4	30.6	25.8	24.3	20.7	18.5	17.6	16.5	13.4	12.5
Estonia <sup>d</sup>	23.1	20.7	21.3	21.4	29.5	35.4	35.9	41.9	44.4	46.9	43.8	46.9	42.0	38.6	39.6	39.8
Latvia	26.8	27.4	29.0	29.5	33.9	44.9	51.3	60.1	69.4	75.5	70.0	72.3	73.4	65.9	63.7	59.4
Lithuania	32.6	34.1	34.7	37.2	44.2	55.1	58.5	65.7	78.0	79.6	72.6	66.6	63.9	60.4	65.1	59.0
Bulgaria	25.9	25.9	29.8	37.9	38.0	37.5	40.5	37.2	41.3	49.9	45.5	41.0	48.2	47.8	41.7	42.4
Romania	58.3	64.6	62.1	73.3	82.5	87.4	94.9	98.5	98.2	101.1	104.0	105.5	115.3	120.3	116.1	114.3
Albania <sup>b</sup>	21.5	20.0	19.5	16.7	20.0	17.0	20.3	21.4	19.6	20.6	22.6	19.5	20.2	19.8	19.3	17.5
Bosnia-Herzegovina <sup>c</sup>	94.2	90.4	70.9	-	-	-	-	63.0	75.8	77.7	76.1	64.3	64.0	43.4	44.5	60.2
Croatia	60.0	53.9	45.1	45.8	47.7	46.4	44.3	48.4	44.9	47.1	38.9	37.5	34.3	33.1	33.6	29.2
FYR Macedonia	40.3	39.7	35.2	32.1	36.8	35.7	39.6	-	34.7	30.9	26.4	33.0	34.3	35.9	34.4	33.5
Serbia and Montenegro <sup>d</sup>	48.2	39.4	42.9	36.1	36.6	34.3	39.5	42.6	38.3	39.9	36.0	38.9	-	-	-	-
Belarus	30.6	29.8	30.9	33.8	37.3	42.5	44.3	49.3	53.4	55.6	53.6	49.9	47.5	45.0	46.6	50.6
Moldova <sup>e</sup>	45.5	39.6	43.8	43.1	44.6	50.8	63.5	67.6	73.0	80.0	72.6	70.4	83.1	83.6	87.5	91.5
Russia	37.6	34.2	34.0	35.8	42.8	47.7	57.3	66.9	73.1	75.1	84.3	89.1	87.1	84.9	82.0	82.7
Ukraine	34.5	31.9	32.3	35.0	38.4	39.9	41.8	46.0	49.3	55.5	54.6	60.4	69.7	76.0	77.8	81.2
Armenia	18.1	16.6	20.0	15.8	15.8	19.5	21.6	24.0	27.7	37.4	37.7	33.8	35.3	43.6	44.7	48.5
Azerbaijan	41.0	34.9	37.0	36.9	39.4	37.1	38.9	48.0	54.9	55.0	58.0	63.5	60.1	53.7	47.6	44.2
Georgia <sup>g</sup>	27.8	27.7	27.5	22.9	22.8	58.7	67.9	119.8	119.7	99.6	101.4	96.8	86.7	96.9	92.8	89.7
Kazakhstan	74.1	67.2	66.0	66.4	63.6	61.9	70.1	87.0	93.9	122.8	141.0	153.1	155.4	164.7	160.4	154.3
Kyrgyzstan	49.5	52.1	56.4	57.2	53.7	58.7	71.6	85.9	110.5	121.0	131.8	108.3	127.3	126.5	122.4	113.2
Tajikistan	46.9	44.2	39.1	30.2	32.0	35.7	29.3	28.7	34.2	41.2	42.1	44.9	55.6	49.6	60.4	66.6
Turkmenistan <sup>i</sup>	58.4	61.3	58.6	50.1	51.0	43.8	43.3	45.2	71.8	78.6	83.4	81.1	77.1	71.5	71.4	64.0
Uzbekistan	-	46.1	46.0	44.0	44.9	43.5	44.1	52.4	55.8	59.4	64.6	65.5	73.3	79.4	77.6	75.8

a. For population sources, see notes to Table 1.1.  
b. 2004: European health for all database (2006).  
c. 1989-1990 and 1995-2004: European health for all database (2006).  
d. 2003-2004: European health for all database (2006).  
e. 1996-2004: European health for all database (2006).  
f. Data for Kosovo 1998-2000 are SMSO estimates.  
g. Data for 2001-2004 exclude Transdniestra.  
h. Data for 1992-2004 exclude Abkhazia and Tskhinvali.  
i. Cases in active phase.

#### 4.7 Incidence of sexually transmitted diseases (newly registered cases of syphilis and gonorrhoea per 100,000 population)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	59.9	62.8	71.4	73.3	46.5	31.1	22.9	15.9	15.2	15.2	15.0	16.6	21.1	17.9	17.8	15.4
Hungary	44.6	48.1	43.8	36.8	26.6	25.1	23.2	21.2	18.5	16.6	14.7	15.2	14.4	12.9	12.4	13.2
Poland	27.4	27.0	19.6	15.1	12.9	10.0	8.1	7.2	6.1	5.6	4.8	4.5	4.6	4.6	4.3	3.6
Slovakia	31.4	38.1	38.3	37.0	26.4	14.6	11.0	7.0	7.2	5.7	7.4	8.5	13.9	13.4	10.9	12.4
Slovenia	0.3	0.1	0.4	0.2	0.4	0.3	0.7	0.5	5.0	4.6	6.6	9.3	14.3	15.4	16.2	10.6
Estonia	132.3	132.4	154.7	193.5	259.5	269.5	272.6	240.8	219.2	189.5	141.8	104.1	80.9	60.7	-	-
Latvia <sup>b</sup>	106.0	104.4	101.2	137.0	300.5	367.4	392.8	356.0	269.4	219.0	142.8	104.3	75.8	79.7	78.2	73.8
Lithuania <sup>c</sup>	-	81.8	87.8	116.8	171.6	209.0	204.9	184.4	144.5	107.4	83.1	62.2	47.3	34.0	-	-
Bulgaria	51.7	66.7	72.4	65.7	47.4	43.5	43.9	48.2	46.3	50.7	45.6	26.8	24.2	21.4	11.3	11.6
Romania	-	-	-	54.8	52.8	54.9	59.7	51.9	52.1	51.7	54.5	67.0	76.2	74.8	56.2	50.5
Albania	-	-	-	-	-	-	0.7	0.4	0.4	1.5	1.0	1.0	1.4	1.4	1.5	1.7
Bosnia-Herzegovina	6.1	4.2	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-
Croatia	11.0	9.0	7.1	4.7	3.9	2.8	2.1	1.4	1.2	1.4	1.4	0.8	1.1	0.8	0.8	1.6
FYR Macedonia	5.1	7.7	6.3	4.3	1.6	1.9	2.1	1.3	1.3	0.5	1.5	1.1	1.4	0.4	0.2	0.4
Serbia and Montenegro <sup>d</sup>	9.2	4.0	3.9	9.3	10.3	17.6	25.1	20.4	20.0	16.3	13.3	-	-	-	-	-
Belarus	108.9	101.9	107.5	143.1	197.4	244.6	317.0	339.6	305.8	264.6	240.3	204.0	158.5	125.1	109.0	102.3
Moldova <sup>e</sup>	128.4	117.4	110.2	151.8	195.0	233.6	274.8	281.5	292.4	274.3	208.6	174.8	142.9	135.5	128.5	122.7
Russia	141.8	133.3	135.7	182.7	263.4	288.6	349.5	399.7	387.2	333.9	303.1	283.3	249.3	210.7	175.2	157.3
Ukraine	86.1	79.1	78.7	104.5	135.9	177.3	208.5	226.1	208.0	194.7	167.0	144.8	129.8	110.8	97.9	89.9
Armenia	41.2	33.2	30.1	20.4	37.3	44.6	47.1	55.3	44.4	39.8	35.8	30.8	31.8	35.1	27.5	23.8
Azerbaijan	25.0	13.3	12.0	17.8	21.1	24.4	35.4	25.4	21.5	21.1	20.3	18.2	17.4	16.5	19.6	34.5
Georgia <sup>f</sup>	76.4	-	55.0	47.0	43.1	39.1	44.2	41.7	76.4	95.8	97.1	86.5	63.2	94.1	57.0	48.0
Kazakhstan	110.4	108.9	118.5	134.3	152.6	149.5	260.2	360.0	370.1	239.2	320.6	322.9	315.4	297.0	208.6	200.9
Kyrgyzstan <sup>g</sup>	-	217.6	231.4	243.1	228.0	243.9	291.8	369.2	389.1	345.9	327.1	298.0	270.8	233.1	221.3	215.0
Tajikistan	24.7	21.7	21.2	17.3	31.7	31.4	40.9	33.1	35.8	54.4	56.4	49.1	60.4	63.0	56.4	51.7
Turkmenistan	36.8	36.2	36.1	30.6	35.0	44.0	58.7	70.0	88.2	79.8	78.6	62.9	62.6	52.8	47.5	43.5
Uzbekistan	-	-	21.1	21.6	27.7	33.8	52.2	67.9	76.5	75.0	70.4	60.7	60.5	55.8	49.5	44.2

a. For population sources, see notes to Table 1.1; in many countries there has been an increase in under-reporting since 1989.  
b. Includes chlamydial infection and anogenital herpes.  
c. Due to changes in registration system, data for 2003-2004 are not comparable.  
d. Data for Kosovo 1998-1999 are SMSO estimates.  
e. Data for 2001-2004 exclude Transdnestr.  
f. Data for 1992-2004 exclude Abkhazia and Tskhinvali.  
g. Includes trichomoniasis.

#### 4.8 Incidence of sexually transmitted diseases in population aged 15-19 (newly registered cases of syphilis and gonorrhoea per 100,000 relevant population)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	-	-	-	-	-	120.7	81.2	47.2	36.4	33.1	29.2	29.7	29.0	29.9	27.1	21.0
Hungary	133.3	137.8	111.3	85.3	62.3	59.5	42.2	37.2	30.3	20.7	20.1	23.1	22.1	16.3	18.1	20.9
Poland	36.6	38.9	27.1	16.6	14.6	8.3	7.7	5.6	5.3	3.8	3.6	2.0	2.4	1.7	2.3	1.3
Slovakia	101.6	110.5	118.3	-	-	-	-	-	-	-	-	-	6.8	11.2	7.0	7.3
Slovenia	-	-	-	-	-	-	-	-	-	-	-	-	6.7	3.8	3.9	0.8
Estonia	424.2	425.2	513.5	601.7	724.4	742.7	643.9	488.7	466.4	377.2	210.0	165.3	111.4	84.9	-	-
Latvia <sup>b</sup>	-	-	297.3	414.3	737.7	696.7	596.1	551.7	413.0	305.8	187.6	111.0	62.5	67.8	75.4	63.6
Lithuania <sup>c</sup>	-	-	203.3	309.1	483.9	575.4	528.9	479.9	345.8	208.5	157.0	127.2	69.6	46.7	-	-
Bulgaria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Romania	-	-	-	104.5	113.6	118.3	124.9	106.7	108.3	110.8	121.8	139.6	145.2	135.9	105.4	91.0
Albania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croatia	12.7	11.9	8.6	6.6	6.3	3.8	2.2	2.6	1.6	2.6	1.6	-	-	-	-	-
FYR Macedonia <sup>d</sup>	9.8	14.1	10.1	9.4	2.5	1.8	1.8	1.2	3.0	-	-	1.2	-	-	-	-
Serbia and Montenegro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belarus	334.5	301.7	299.4	416.7	563.7	674.4	767.3	730.3	638.9	514.1	480.5	384.0	273.5	220.7	193.7	177.2
Moldova <sup>e</sup>	317.0	269.7	247.4	390.4	499.8	585.9	624.4	602.2	533.0	470.5	320.0	272.8	173.6	172.6	168.6	152.9
Russia	473.9	421.9	420.2	569.0	803.3	803.7	871.4	942.6	837.2	684.5	595.1	514.3	435.2	364.6	296.0	261.5
Ukraine	259.8	229.2	215.4	298.5	372.6	489.9	540.2	577.2	458.8	409.9	290.3	242.9	207.8	174.0	145.8	134.0
Armenia	-	46.6	39.3	31.9	-	63.1	68.5	63.2	53.5	84.8	23.4	21.1	27.0	12.0	9.1	26.6
Azerbaijan	19.2	14.0	15.1	22.3	26.4	21.1	15.1	33.1	15.0	19.3	9.3	13.6	10.9	8.8	10.3	14.9
Georgia <sup>f</sup>	-	-	-	71.6	70.9	72.8	55.7	40.7	78.9	94.2	38.4	30.8	98.8	133.4	56.7	54.2
Kazakhstan <sup>g</sup>	189.8	200.8	227.5	242.2	126.1	106.0	209.8	267.3	277.3	224.8	138.4	126.3	108.0	85.0	74.3	60.5
Kyrgyzstan <sup>h</sup>	54.4	50.6	70.8	93.8	91.0	105.2	162.3	266.0	253.9	215.6	136.8	117.1	114.3	93.9	71.6	61.7
Tajikistan	27.6	28.2	-	30.2	34.7	32.8	36.9	24.8	32.2	27.8	22.1	18.0	23.4	15.0	12.2	8.0
Turkmenistan	19.9	23.9	28.0	28.1	39.1	41.7	60.1	63.6	75.2	-	-	-	-	-	-	-
Uzbekistan	-	-	-	28.1	34.7	39.5	70.6	80.8	82.2	76.8	70.9	62.2	58.4	62.7	54.0	46.7

a. For population sources, see notes to Table 1.1; in many countries there has been an increase in under-reporting since 1989.  
b. Includes chlamydial infection and anogenital herpes.  
c. Due to changes in registration system, data for 2003-2004 are not comparable.  
d. Only gonorrhoea.  
e. Data for 2001-2004 exclude Transdnestr.  
f. Data exclude Abkhazia and Tskhinvali.  
g. Data for 1993-2004 refer to 15-17 years.  
h. Includes trichomoniasis.

#### 4.9 Registered cases of HIV (newly registered)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	-	-	-	24	27	38	40	50	63	31	50	58	51	50	61	75
Hungary	36	40	55	62	56	65	81	62	72	74	62	48	82	78	63	75
Poland	-	-	559	482	384	423	539	551	579	638	527	630	560	700	610	656
Slovakia	-	3	5	2	5	11	8	4	8	11	2	19	8	11	13	15
Slovenia	6	2	5	5	3	4	14	3	7	16	15	13	16	22	14	25
Estonia <sup>b</sup>	-	-	-	-	5	12	11	8	9	10	12	390	1,474	899	840	743
Latvia	-	6	3	1	5	8	21	17	25	163	241	466	807	542	403	323
Lithuania	1	8	1	5	4	9	11	12	31	52	66	65	72	397	110	135
Bulgaria <sup>c</sup>	6	10	12	18	12	18	14	34	30	26	27	49	40	43	63	-
Romania <sup>b</sup>	-	-	-	-	234	722	854	699	650	648	364	290	440	335	244	293
Albania <sup>b</sup>	-	-	-	-	2	9	12	7	3	5	4	10	20	26	21	29
Bosnia-Herzegovina <sup>b</sup>	-	-	-	-	-	-	-	-	3	22	10	2	7	4	12	31
Croatia <sup>d</sup>	5	10	16	13	21	26	20	24	28	35	28	36	26	42	46	50
FYR Macedonia	2	1	1	-	3	4	-	3	-	3	5	4	3	5	-	5
Serbia and Montenegro <sup>c</sup>	32	54	62	82	69	86	98	91	69	95	55	74	92	101	107	105
Belarus	12	14	12	21	10	5	8	1,021	653	554	411	527	578	915	713	778
Moldova	-	1	-	2	3	4	40	47	404	408	155	174	210	165	175	227
Russia <sup>e</sup>	-	441	84	88	107	161	193	1,511	4,353	4,034	20,129	59,281	87,177	50,378	39,699	28,371
Ukraine	-	-	-	-	-	-	1,499	5,422	8,934	8,112	5,235	5,654	6,139	7,423	8,097	12,175
Armenia <sup>f</sup>	-	-	-	-	-	-	-	27	37	9	35	29	29	41	29	49
Azerbaijan	-	-	-	3	-	3	-	2	11	66	83	59	120	90	102	100
Georgia <sup>c</sup>	1	3	1	6	-	1	2	8	18	24	30	65	93	95	100	163
Kazakhstan	-	2	1	1	2	-	5	184	429	297	184	345	1,171	735	746	698
Kyrgyzstan <sup>g</sup>	-	-	-	-	-	-	-	1	2	6	10	16	149	160	132	161
Tajikistan	-	-	-	-	-	-	-	-	-	1	5	7	34	32	42	198
Turkmenistan	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Uzbekistan <sup>b</sup>	-	-	2	-	1	-	1	3	7	3	28	154	549	981	1,836	2,016

a. Official statistics indicate the size of the known HIV population, i.e., is those diagnosed with HIV at hospitals or clinics; UNAIDS estimates suggest that the numbers of those infected may be significantly higher than officially registered figures (see www.unaids.org).  
b. EuroHIV (2005).  
c. Data for 2001-2004 taken from EuroHIV (2005).  
d. Includes cases of AIDS.  
e. Data for 1990 are total cases registered in 1987-1990.  
f. Data for 1996-1998 and 2000 taken from EuroHIV (2004).  
g. Includes foreign citizens.

#### 4.10 Public expenditure on health (per cent GDP)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic <sup>a</sup>	4.2	4.6	4.7	4.9	6.4	6.5	6.4	6.2	6.1	6.1	6.0	6.0	6.3	6.4	6.7	6.5
Hungary <sup>b</sup>	5.2	6.1	6.3	6.8	6.7	7.2	6.3	5.9	5.7	5.5	5.4	5.0	5.1	5.5	5.8	-
Poland <sup>a</sup>	-	4.5	4.6	4.7	4.4	4.1	4.1	4.4	4.1	3.9	3.6	4.3	4.3	4.3	-	-
Slovakia <sup>a</sup>	5.0	5.4	4.9	5.1	6.4	7.1	5.9	7.0	5.3	5.2	5.2	5.1	5.0	5.1	5.2	-
Slovenia <sup>a</sup>	5.6	5.6	5.2	7.4	7.1	7.2	7.0	6.9	6.8	6.9	6.7	6.9	7.1	7.0	6.9	-
Estonia <sup>a</sup>	-	-	-	-	-	-	-	5.4	5.2	5.1	4.9	4.2	4.0	3.9	4.0	-
Latvia <sup>a</sup>	-	2.5	2.6	2.8	4.1	4.1	4.0	4.0	3.8	3.3	4.1	3.5	3.4	3.3	3.3	2.4
Lithuania <sup>a</sup>	2.8	3.0	3.3	3.8	3.8	4.4	4.2	4.1	4.5	4.7	4.6	4.4	4.1	4.0	3.9	4.2
Bulgaria <sup>c</sup>	-	-	6.4	5.7	5.1	4.2	3.5	2.9	2.8	3.4	3.3	3.3	3.0	2.9	4.4	4.4
Romania <sup>a</sup>	2.4	2.8	3.3	2.6	2.7	3.0	3.2	3.4	3.1	4.1	3.9	4.1	4.2	4.2	4.1	3.7
Albania <sup>a</sup>	2.9	3.3	4.8	3.4	3.0	2.8	2.1	1.8	1.5	1.2	2.3	1.7	1.7	1.8	-	-
Bosnia-Herzegovina <sup>a</sup>	3.2	5.1	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Croatia <sup>d</sup>	-	-	-	-	-	-	4.6	4.2	3.6	4.6	5.3	6.5	5.4	-	-	-
FYR Macedonia <sup>c</sup>	-	-	-	-	-	4.5	5.0	5.3	4.9	5.0	5.0	4.5	5.8	5.0	5.4	-
Serbia and Montenegro <sup>e</sup>	3.6	5.5	4.8	5.0	-	6.1	6.4	5.7	5.7	5.3	4.1	3.6	-	-	-	-
Belarus <sup>a</sup>	-	2.6	3.1	3.3	4.8	5.2	4.8	4.8	5.3	4.9	4.9	4.9	4.7	4.7	4.9	4.7
Moldova <sup>f</sup>	-	-	3.9	3.1	4.5	6.2	5.8	6.9	5.8	4.2	2.7	2.7	2.5	3.2	3.6	4.4
Russia <sup>g</sup>	-	-	2.8	2.7	3.6	4.6	4.4	4.4	4.5	3.9	3.0	3.0	3.3	3.8	4.0	3.9
Ukraine <sup>h</sup>	-	-	3.3	-	3.3	-	-	3.8	3.5	3.5	3.1	4.2	3.4	3.4	3.2	3.5
Armenia <sup>i</sup>	-	2.4	3.2	4.4	3.2	2.1	1.7	1.6	1.6	1.6	-	1.2	1.3	1.2	1.2	1.4
Azerbaijan <sup>h</sup>	-	2.9	4.3	2.8	2.8	1.9	1.4	1.5	1.2	0.9	1.6	0.9	0.8	0.8	0.8	-
Georgia <sup>c</sup>	-	3.1	3.5	2.2	0.2	0.2	0.5	0.7	1.1	0.8	0.6	1.0	0.8	0.8	0.6	0.8
Kazakhstan <sup>h</sup>	-	3.3	4.3	2.1	2.5	2.0	2.0	2.6	-	1.8	1.9	2.0	1.8	1.8	1.6	-
Kyrgyzstan <sup>h</sup>	-	-	-	3.4	-	3.3	3.8	3.1	3.2	2.6	2.1	1.9	2.3	1.9	2.0	2.1
Tajikistan <sup>i</sup>	-	-	-	-	-	-	-	1.3	1.3	1.1	1.0	0.9	1.0	0.9	0.9	1.0
Turkmenistan <sup>c</sup>	-	-	-	-	-	1.6	1.7	2.2	3.4	3.6	2.7	3.3	2.8	2.5	2.9	-
Uzbekistan <sup>h</sup>	-	-	5.9	-	4.8	4.6	3.4	3.1	3.0	3.3	2.9	3.0	2.6	2.4	2.4	2.4

a. IRC estimate based on WHO (2006).  
b. Data for 2003 are consumption expenditures.  
c. Consumption expenditures of government on health.  
d. Includes social welfare expenditure.  
e. GDP data for 1989-1992 are for net material product concept.  
f. The International Monetary Fund reports that data for Moldova may overstate expenditure in some years. See International Monetary Fund (2001).  
g. Includes expenditure on physical culture, sport and social security.  
h. Total health expenditures taken from WHO (2006).  
i. The government of Azerbaijan reports public health expenditure as 0.9 per cent of GDP in 1998, 1999 and 2001, and as 1.0 per cent of GDP in 2000. See Republic of Azerbaijan (2003), Table 3.2.  
j. Data for 1999-2003 are consumption expenditures of government on health.

## 5. Education

### 5.1 Basic education gross enrolments (per cent of relevant population)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic <sup>b</sup>	96.9	98.6	100.7	100.7	100.6	100.0	99.6	97.3	97.6	97.6	97.7	98.4	98.6	98.7	98.9	98.7
Hungary <sup>c</sup>	98.5	98.6	97.7	97.3	96.6	96.2	96.6	96.3	96.1	96.6	97.8	99.2	99.1	99.6	99.8	100.6
Poland <sup>d</sup>	100.8	100.2	99.9	99.5	99.3	99.1	99.1	99.3	99.9	100.1	100.2	100.2	99.8	100.3	100.4	100.4
Slovakia <sup>e</sup>	97.0	98.1	98.5	98.4	98.5	97.9	97.5	96.8	98.7	101.3	107.5	107.4	106.2	107.0	105.9	105.9
Slovenia <sup>e</sup>	97.0	97.1	96.9	97.0	97.4	97.7	98.3	98.5	98.7	98.7	99.5	100.1	101.1	103.5	97.1	-
Estonia <sup>f</sup>	96.3	95.2	94.0	93.1	93.4	93.7	94.9	95.6	96.8	99.2	100.9	102.8	103.8	104.4	-	-
Latvia <sup>f</sup>	95.7	97.5	94.2	91.8	89.3	88.8	89.3	91.4	92.2	92.4	93.3	96.5	99.4	101.0	101.7	103.1
Lithuania <sup>g</sup>	95.0	93.7	92.5	92.9	92.0	93.4	95.6	96.5	98.5	99.8	99.2	101.5	102.4	103.0	104.1	103.8
Bulgaria <sup>h</sup>	98.4	98.6	97.3	95.1	94.0	94.3	93.7	93.6	94.0	94.3	94.8	95.3	97.1	98.7	98.5	98.4
Romania <sup>h</sup>	95.8	92.5	91.9	91.7	91.4	92.2	93.7	94.2	96.3	97.8	98.5	98.9	100.0	100.9	103.6	103.6
Albania <sup>h</sup>	102.2	102.0	97.9	94.5	95.3	96.6	96.8	96.0	94.6	92.6	89.8	105.5	104.0	101.2	100.2	98.5
Bosnia-Herzegovina <sup>h,i</sup>	93.5	93.0	95.0	-	-	-	-	92.3	98.1	93.7	90.2	85.2	83.0	80.7	83.1	84.8
Croatia <sup>h,i</sup>	94.2	80.9	79.4	89.4	84.4	82.3	80.4	82.4	82.3	82.8	80.7	82.5	95.2	95.9	97.0	97.9
FYR Macedonia <sup>h</sup>	102.0	100.7	99.8	97.6	97.0	97.0	97.9	98.4	99.1	98.8	99.6	100.1	98.6	97.7	97.7	97.8
Serbia and Montenegro <sup>h,k</sup>	95.1	94.7	-	-	-	-	-	-	-	-	99.2	96.9	96.5	95.7	-	-
Belarus <sup>l</sup>	95.9	94.8	94.3	94.5	94.1	94.0	94.6	94.3	94.9	90.8	91.2	91.8	92.3	93.3	93.6	93.6
Moldova <sup>f,m</sup>	94.1	93.9	93.5	93.9	92.2	92.0	92.6	92.8	92.5	92.5	94.1	93.5	94.0	94.7	94.7	94.1
Russia <sup>h</sup>	100.7	100.4	99.6	98.5	97.0	96.9	97.4	97.5	97.9	98.8	99.3	100.4	102.5	103.4	103.9	104.2
Ukraine <sup>f</sup>	92.8	92.3	91.5	91.1	90.4	90.6	90.8	91.2	90.7	89.9	89.9	91.7	93.7	94.7	94.4	94.5
Armenia <sup>h</sup>	95.5	94.6	91.6	91.1	86.4	82.2	81.4	82.8	82.9	82.6	80.3	79.5	79.0	88.4	87.2	86.9
Azerbaijan <sup>h</sup>	88.5	88.5	88.6	88.9	89.4	90.7	91.8	91.2	92.1	86.7	86.1	91.1	93.0	92.5	93.8	96.0
Georgia <sup>f,o</sup>	95.0	94.4	91.5	84.4	91.2	92.1	93.6	97.1	99.5	100.5	100.3	99.2	96.6	97.3	-	-
Kazakhstan <sup>p</sup>	94.8	94.6	93.9	94.1	93.8	94.2	94.4	94.7	94.2	94.1	94.3	99.7	100.1	100.0	101.9	103.3
Kyrgyzstan <sup>p</sup>	92.2	92.0	92.0	92.0	85.6	86.6	88.0	89.4	89.9	90.3	89.8	96.2	95.2	94.8	95.1	95.2
Tajikistan <sup>f</sup>	94.1	94.6	94.8	90.3	85.5	86.4	87.0	85.9	85.8	89.7	89.1	88.5	91.1	94.4	95.4	95.4
Turkmenistan <sup>f</sup>	91.2	89.2	85.4	83.3	81.8	80.8	81.5	81.0	80.5	80.5	79.5	80.2	80.4	80.5	80.0	-
Uzbekistan <sup>p</sup>	92.1	91.5	88.3	87.8	87.3	87.6	88.0	88.4	88.9	89.2	88.9	97.0	97.8	97.5	97.1	96.8

a. For population sources, see notes to Tables 1.1 and 1.2.

b. Data for 1989-1995 for children aged 6-13; 1996-2004 for children aged 6-14.

c. Children aged 6-13.

d. Data for 1989-2000 refer to children aged 7-14; 2001-2004 children aged 7-15.

e. Data for 1989-2002 refer to children aged 7-14; 2003 children aged 6-14.

f. Data for children aged 7-15.

g. Data for 1989-1998 refer to children aged 7-15; 1999-2004 children aged 7-16.

h. Children aged 7-14.

i. Data are IRC estimates, end-of-school-year, pupil data 1995 (BHAS, 1999).

j. Pupil data for 1990-2000 are underreported.

k. Pupil data for 1991-1998 exclude ethnic Albanians in Kosovo; 1999-2002 net rates, excludes Kosovo.

l. Data for 1989-1998 refer to children 7-15, for 1999-2004 refer to children aged 6-15.

m. Data for 1992-2004 exclude Transdnestr.

n. Data for 1989-1999 refer to children 7-15, for 2000-2004 to children 6-14.

o. Data for 1992-2002 exclude Abkhazia and Tskhinvali.

p. Break in time-series in 2000 due to change in education system.

## 5.2 Basic education net enrolments (per cent of population aged 7-14)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic <sup>a</sup>	99.4	99.2	99.1	97.6	97.7	98.4	97.2	97.1	97.3	97.1
Hungary	94.3	94.6	94.6	95.1	94.7	-	92.4	92.4	92.3	92.5
Poland	97.2	97.4	98.0	98.1	98.3	98.4	98.5	98.5	98.5	98.5
Slovakia	-	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	96.8	97.3	96.7	96.4	96.1	96.5	-
Estonia	-	-	-	-	-	-	-	-	-	-
Latvia	90.1	92.9	94.2	94.7	95.4	96.1	96.1	96.3	96.4	97.3
Lithuania	-	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	90.7	91.4	91.9	92.3	93.8	94.7	94.7	94.2
Romania	85.8	86.8	88.9	90.3	90.6	93.9	91.6	91.9	92.3	94.3
Albania	-	-	-	-	-	-	-	-	-	88.6
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	-	-
Croatia	-	94.4	94.3	95.9	-	-	95.7	94.5	95.3	95.7
FYR Macedonia	-	-	-	-	-	-	-	-	94.9	94.9
Serbia and Montenegro	-	-	-	-	-	96.9	96.5	95.7	-	-
Belarus	-	-	-	-	-	-	-	-	-	-
Moldova	-	-	-	-	-	-	-	-	-	94.1
Russia	92.6	92.5	92.7	93.2	93.4	93.6	94.9	95.1	95.3	95.5
Ukraine	-	-	-	-	-	-	-	-	95.9	96.3
Armenia	-	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	88.7	88.3	89.0	90.6
Georgia	-	-	-	-	-	-	-	-	-	-
Kazakhstan	-	-	-	-	-	-	-	-	-	-
Kyrgyzstan	-	-	-	93.0	93.4	94.1	93.9	93.7	94.0	93.7
Tajikistan	-	86.8	89.9	84.9	89.4	90.8	94.2	95.4	96.1	95.7
Turkmenistan	-	-	-	-	86.4	87.4	88.0	88.3	88.1	87.1
Uzbekistan	-	-	-	-	-	-	-	-	-	-

a. Age population 6-13 (to 1994 year), 6-14 (from 1995 year).

## 5.3 General secondary education enrolments (gross rates, per cent of population aged 15-18)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic <sup>b</sup>	14.1	14.9	13.1	13.0	12.3	12.7	13.6	11.9	12.4	13.4	14.5	17.3	16.9	18.9	18.9	19.2
Hungary <sup>c</sup>	17.3	17.6	18.2	19.6	20.8	22.1	23.2	24.4	25.7	26.8	27.8	34.3	35.4	36.5	38.1	38.4
Poland	20.3	20.9	22.5	24.3	25.9	27.7	29.5	30.3	31.8	33.7	36.2	38.9	32.4	39.1	45.1	47.2
Slovakia <sup>c</sup>	14.3	15.0	15.7	16.7	17.8	19.0	20.5	21.6	22.3	22.6	21.7	23.1	24.9	27.8	30.9	31.6
Slovenia	-	-	-	-	19.5	20.1	20.5	21.6	22.7	25.6	28.9	31.6	34.5	36.4	37.3	-
Estonia	37.8	36.7	37.2	38.0	41.0	45.9	46.3	47.6	47.7	45.2	44.8	45.0	46.4	46.8	-	-
Latvia <sup>d</sup>	22.1	20.9	20.6	20.8	25.2	27.3	29.0	37.1	39.1	41.2	43.1	43.1	41.0	41.6	44.6	45.2
Lithuania <sup>e</sup>	35.5	34.9	33.0	31.8	31.1	33.6	35.9	40.1	41.1	43.2	37.6	42.2	45.9	48.9	51.0	51.0
Bulgaria	30.9	29.8	28.9	29.6	30.0	31.6	32.5	32.2	31.4	32.0	32.6	33.1	35.0	38.3	40.0	40.4
Romania	-	11.5	15.9	17.2	18.6	19.6	20.1	21.0	21.4	21.4	26.3	26.1	26.3	26.2	26.2	26.2
Albania	24.5	23.0	30.5	31.7	31.8	31.7	30.6	32.4	34.8	35.8	35.8	37.9	40.8	42.2	44.5	48.4
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	-	-	-	16.9	16.4	16.6	16.2	15.8
Croatia	-	-	-	14.7	18.6	19.1	19.1	20.0	19.6	20.0	19.9	21.0	21.2	21.6	22.1	22.8
FYR Macedonia	-	-	-	10.6	14.6	15.9	17.3	18.0	18.8	20.3	22.2	24.1	25.7	27.1	28.0	28.3
Serbia and Montenegro <sup>f</sup>	-	-	-	9.5	12.4	12.8	12.9	13.5	13.7	14.0	14.2	13.9	13.8	-	-	-
Belarus <sup>g</sup>	53.6	53.7	52.6	50.1	48.3	50.1	49.7	53.2	56.3	56.7	57.0	54.6	54.7	54.9	57.9	59.8
Moldova <sup>h</sup>	27.4	26.3	22.2	19.8	19.9	20.3	20.8	22.0	21.7	22.9	21.1	22.7	24.3	27.2	27.9	28.5
Russia <sup>i</sup>	32.3	32.9	31.1	29.8	29.5	31.0	32.0	33.6	35.0	36.6	36.9	36.7	37.3	38.1	37.9	39.7
Ukraine	25.3	25.0	24.4	23.3	22.8	23.6	24.1	25.5	27.4	29.3	31.1	30.9	30.5	31.4	31.9	33.0
Armenia	35.9	34.3	32.5	31.3	31.2	30.7	29.1	29.6	30.6	31.8	32.8	32.1	30.5	37.5	37.1	37.4
Azerbaijan <sup>j</sup>	34.0	33.5	33.7	31.7	27.8	25.7	24.6	26.7	30.9	31.5	31.6	23.2	22.5	32.5	35.5	35.1
Georgia <sup>k</sup>	39.9	39.2	33.7	26.0	24.1	23.1	25.7	26.4	25.3	26.1	26.5	30.3	31.4	32.0	33.8	35.4
Kazakhstan <sup>l</sup>	32.5	33.3	32.0	29.5	28.0	26.6	26.2	30.1	34.5	38.5	39.3	30.6	31.2	37.9	37.3	34.5
Kyrgyzstan <sup>l</sup>	36.7	36.6	35.5	31.9	27.1	26.1	25.2	27.3	30.9	35.2	37.5	23.5	24.5	36.1	35.1	32.7
Tajikistan <sup>l</sup>	40.4	40.3	37.2	29.5	26.9	25.5	23.8	22.0	22.2	16.3	17.8	22.8	21.1	19.1	21.4	21.0
Turkmenistan	41.7	40.4	37.5	35.4	34.6	34.5	33.5	23.7	23.8	24.7	28.7	25.1	25.1	22.5	22.1	21.7
Uzbekistan <sup>l</sup>	36.3	37.1	36.0	30.8	27.6	27.2	26.3	26.2	28.0	29.6	30.9	22.7	21.2	34.9	33.4	33.2

a. Normally 2-4 year programmes; for population sources, see notes to Tables 1.1 and 1.2.

b. Data for 1989-1995 refer to children aged 14-17; 1996-2004 for children aged 15-18; break in time-series in 2000 due to change in education system.

c. Children aged 14-17.

d. Data for 1996-2004 include those in part-time comprehensive education.

e. Data for 1999-2004 refer to children aged 17-18.

f. Pupil data for 1992-1998 exclude ethnic Albanians in Kosovo; 1999-2001 excludes Kosovo.

g. Children aged 16-17.

h. Data for 1992-2004 exclude Transdniestra.

i. Children aged 15-17.

j. Data for 2000-2001 affected by change in education system.

k. Data for 1992-2004 exclude Abkhazia and Tskhinvali.

l. Data for 1998-1999 affected by change in education system.

#### 5.4 Vocational/technical secondary education enrolments (gross rates, per cent population aged 15-18)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic <sup>b</sup>	65.1	63.9	60.9	61.7	65.7	72.4	77.4	60.1	60.1	57.6	61.3	68.9	71.0	71.7	72.8	73.5
Hungary <sup>c</sup>	55.3	55.8	55.8	57.0	58.8	60.3	62.8	65.5	67.4	68.3	68.5	69.2	70.4	71.1	61.2	61.5
Poland <sup>d</sup>	69.8	68.4	66.8	66.2	66.5	67.1	67.0	67.1	66.5	65.7	65.0	64.1	66.2	60.4	57.7	53.9
Slovakia <sup>e</sup>	64.7	63.2	62.4	63.1	64.1	65.9	67.7	68.1	68.1	68.8	58.3	59.6	63.6	56.0	55.1	51.1
Slovenia	-	-	-	-	61.0	62.2	63.6	65.5	68.3	67.7	66.5	65.5	63.7	62.8	62.3	
Estonia <sup>e</sup>	-	27.5	28.3	27.5	27.2	27.6	28.6	30.7	31.1	32.0	40.2	27.9	28.4	26.1	-	-
Latvia	48.1	45.6	44.6	41.0	37.3	34.5	32.4	27.4	24.5	24.0	27.1	26.8	26.3	25.3	25.9	26.5
Lithuania <sup>f</sup>	37.8	34.0	30.9	21.7	21.2	20.4	20.8	21.0	21.4	21.5	25.5	20.6	18.4	17.7	17.2	18.0
Bulgaria	47.3	47.2	45.4	43.4	42.2	43.1	43.6	43.3	42.2	41.8	41.5	42.3	44.1	47.3	49.8	49.3
Romania	-	-	57.9	47.7	45.6	47.1	49.1	49.0	48.9	48.2	43.9	46.1	46.9	47.4	48.3	49.7
Albania	54.3	55.3	31.2	18.7	13.1	8.9	7.9	7.0	6.5	6.2	5.9	6.8	7.5	8.1	8.6	9.7
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	36.0	-	-	37.5	36.6	34.9	32.9	30.6
Croatia	-	-	58.0	63.4	60.4	56.5	58.3	61.1	59.8	60.9	58.2	60.0	60.1	61.5	62.2	62.9
FYR Macedonia	58.4	56.5	55.1	43.7	39.5	39.4	39.7	40.8	41.4	42.3	43.3	43.3	43.3	42.6	44.2	44.3
Serbia and Montenegro <sup>g</sup>	-	-	-	-	-	-	-	-	-	-	43.3	42.0	41.2	-	-	
Belarus <sup>h</sup>	25.5	24.3	24.0	24.0	24.4	23.5	22.0	20.7	20.7	21.1	21.1	21.0	20.8	19.5	18.7	17.7
Moldova <sup>i</sup>	39.7	38.0	35.1	30.6	28.3	26.7	25.9	25.9	25.4	22.8	17.4	14.8	13.6	12.9	14.2	16.1
Russia	53.4	50.0	48.4	45.6	43.4	41.0	41.0	40.9	40.2	39.1	39.4	40.4	39.8	40.6	41.4	42.1
Ukraine	40.3	39.6	39.5	39.0	36.5	34.7	33.4	32.6	30.1	28.7	28.2	28.4	28.3	29.3	30.1	29.6
Armenia	31.6	29.0	25.8	22.7	18.3	14.9	11.3	11.7	10.9	11.9	12.4	10.3	10.5	11.5	12.1	11.9
Azerbaijan	28.8	26.0	25.0	20.3	15.8	12.8	10.7	10.2	9.8	9.5	9.6	9.7	10.1	10.0	10.3	10.5
Georgia <sup>j</sup>	16.8	16.3	14.8	15.4	13.9	14.3	14.0	15.9	16.9	19.0	18.1	15.9	14.3	13.2	12.4	13.2
Kazakhstan	43.6	40.9	38.8	36.7	34.3	31.9	30.9	27.2	22.9	21.3	20.3	21.5	23.3	24.1	27.4	34.3
Kyrgyzstan	28.3	26.8	26.0	25.2	22.2	19.6	16.1	14.0	13.3	13.1	12.7	12.5	11.9	11.4	11.8	12.7
Tajikistan	19.7	19.1	18.4	16.0	15.5	14.0	12.3	10.6	9.1	8.4	8.6	8.6	8.0	7.8	7.9	7.8
Turkmenistan	25.1	22.8	22.2	21.1	18.7	13.2	10.5	10.4	7.0	4.8	5.2	5.9	5.5	5.5	6.7	6.5
Uzbekistan <sup>k</sup>	33.1	30.0	27.8	26.8	25.3	23.4	22.3	21.5	22.6	23.9	25.0	32.5	31.9	33.5	36.7	41.6

a. Preparatory programmes for specific occupation or trade; for population sources, see notes to Tables 1.1 and 1.2.  
b. Data for 1989-1995 refer to children aged 14-17; 1996-2004 for children aged 15-18; break in time-series in 2000 due to change in education system.  
c. Children aged 14-17.  
d. Data for 2001-2004 refer to children aged 16-18.  
e. Children aged 17-18. Data have been revised by using ISCED 97.  
f. Data for 1999-2004 refer to children aged 17-18; data for 1992-1999 have been revised by excluding ISCED 4.  
g. Data exclude Kosovo.  
h. Children aged 16-19, refer to only technical education.  
i. Data for 1992-2004 exclude Transdniestr.  
j. Data for 1992-2004 exclude Abkhazia and Tskhinvali.  
k. Break in time-series in 2000 due to change in education system.

## 6. Child protection

### 6.1 Children in residential care (in 1,000s)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	17.0	17.1	16.7	16.8	17.4	18.0	18.7	19.1	19.3	19.5	20.0	20.2	20.0	20.0	20.2	20.6
Hungary	14.0	12.6	11.0	10.2	10.0	9.4	9.2	8.9	8.3	9.6	8.8	8.6	8.8	8.3	8.5	8.3
Poland	62.9	64.8	63.4	63.5	64.4	67.2	77.0	76.5	76.4	77.6	76.9	79.2	61.4	59.5	57.4	56.8
Slovakia	9.0	8.6	8.7	8.6	8.7	8.7	9.3	9.3	9.3	8.8	8.8	9.2	9.2	8.5	8.9	9.5
Slovenia <sup>b</sup>	1.8	1.8	1.9	2.0	1.6	1.3	1.4	1.4	1.2	1.2	1.6	1.6	1.6	1.7	1.7	1.9
Estonia	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.7	1.7	1.7	1.7	1.7	1.8	1.9	1.5	1.5
Latvia	0.9	1.7	1.6	1.8	2.0	2.3	2.9	3.3	3.3	3.7	3.7	3.7	3.6	3.6	3.4	3.1
Lithuania <sup>c</sup>	-	17.0	14.2	12.3	12.1	11.0	11.0	11.4	12.1	12.2	12.1	11.5	11.0	10.7	10.8	10.3
Bulgaria <sup>d</sup>	-	27.4	27.2	27.0	27.4	26.9	26.6	27.2	24.4	23.5	23.7	22.8	22.0	12.1	11.0	11.0
Romania	-	47.4	47.0	43.0	44.9	53.0	49.5	52.0	51.8	44.7	38.8	58.4	51.0	44.1	38.2	33.1
Albania <sup>e</sup>	-	-	-	-	-	0.5	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
Bosnia-Herzegovina <sup>f</sup>	-	2.9	-	-	-	-	-	1.7	1.9	2.0	2.2	-	-	-	-	-
Croatia <sup>g</sup>	-	4.9	-	4.0	-	4.2	-	4.3	-	3.7	-	3.9	2.6	2.8	3.8	3.5
FYR Macedonia	1.3	1.5	1.3	1.4	1.2	1.2	1.2	1.2	1.2	1.0	0.9	1.0	0.9	0.9	0.9	0.9
Serbia and Montenegro <sup>h</sup>	-	6.8	-	6.8	-	6.4	-	6.6	-	6.4	-	5.7	-	-	-	-
Belarus	22.0	22.0	19.0	18.7	17.5	17.3	17.6	17.5	17.7	18.5	18.7	18.6	19.3	18.4	16.7	16.4
Moldova <sup>i</sup>	15.6	14.3	12.5	8.7	7.7	8.2	8.0	8.5	8.3	8.2	7.6	7.1	7.0	7.1	7.6	7.6
Russia <sup>j</sup>	504.6	496.2	447.2	429.7	412.5	416.6	428.2	437.0	430.3	429.3	431.7	427.9	429.9	428.1	412.2	409.2
Ukraine <sup>k</sup>	30.0	29.2	31.6	31.1	31.7	32.4	34.3	36.3	38.9	40.7	42.1	44.2	44.1	46.5	46.6	46.4
Armenia	0.3	0.4	0.4	0.5	0.5	0.6	0.8	0.9	1.0	1.1	1.6	1.4	1.5	1.5	2.0	2.0
Azerbaijan	4.7	4.5	4.0	3.5	3.4	3.3	3.0	3.4	3.7	4.0	4.2	4.4	4.5	4.7	4.7	5.1
Georgia <sup>l</sup>	3.2	3.3	2.3	2.0	2.4	1.9	2.5	2.5	2.8	3.1	3.2	3.4	3.4	3.4	3.5	3.1
Kazakhstan <sup>m</sup>	1.9	1.8	1.8	1.6	1.8	4.8	4.9	5.3	5.4	5.4	5.4	5.2	5.3	5.3	8.8	27.0
Kyrgyzstan	-	8.4	7.8	6.3	5.5	4.6	4.9	5.0	4.9	5.4	5.3	4.7	4.9	4.7	4.5	4.5
Tajikistan	3.8	3.7	3.5	3.5	2.7	1.9	1.1	1.6	2.2	2.4	1.6	1.5	1.7	1.9	1.2	1.2
Turkmenistan	0.9	1.0	0.9	0.9	1.0	0.8	1.1	1.0	1.0	1.2	1.0	1.0	0.9	0.9	1.0	0.9
Uzbekistan	14.8	14.8	14.3	17.3	16.5	15.9	15.6	16.8	17.8	18.3	19.2	20.5	22.3	21.8	19.2	23.5

a. Refers to children in infant homes, in orphanages, in boarding homes and schools for children without parental care, disabled children in boarding schools and homes, family-type homes, SOS villages, etc. Children in punitive institutions are normally excluded. Definitions may differ among countries.

b. Data for 1999-2004 include those undergoing behavioural rehabilitation in institutions and youth homes.

c. Data include 18 years and older children residing in child care homes; also includes children living in boarding schools.

d. Data for 2002-2004 selected as per the national legal definition under the Child Protection Law.

e. Data for children in infant homes and orphanages.

f. Data for 1996-1999 are IRC estimates based on data from the Federation of B-H.

g. Data until 2000 include 18 years and older residing in homes for disabled children.

h. Data for 1998 and 2000 exclude Kosovo.

i. Data for 1992-2004 exclude Transnistria.

j. Includes children in general boarding schools.

k. Data for 1989-1990 exclude children in infant homes.

l. Data for 1991-1994 exclude children in child homes and orphanages.

m. Data for 2004 include all types of child care institutions (until 1994: infant homes; for 1994-2003: infant homes and disabled children in public institutional care).

### 6.2 Rate of children in residential care (per 100,000 population aged 0-17)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	610.3	625.4	623.0	644.6	684.9	728.2	782.8	830.0	866.7	898.3	945.4	977.5	989.3	1,008.4	1,035.1	1,073.4
Hungary	537.1	488.4	430.0	408.3	409.8	394.4	393.7	392.0	373.9	441.3	415.8	413.8	428.4	412.9	428.1	423.5
Poland	554.0	572.7	562.7	568.5	583.5	618.7	723.8	734.5	751.2	785.0	799.6	848.2	682.0	687.3	687.2	702.0
Slovakia	559.7	536.8	546.5	551.9	566.0	576.9	626.1	644.8	658.5	639.7	655.7	708.2	720.3	691.5	747.8	821.0
Slovenia	363.5	365.0	385.8	421.6	343.5	288.7	315.1	317.9	274.1	287.5	401.3	419.8	413.6	464.9	466.8	528.0
Estonia	357.5	373.4	345.2	349.1	386.9	408.5	417.9	485.5	507.2	526.0	544.6	559.9	610.2	651.7	-	-
Latvia	128.1	252.5	242.7	275.2	322.5	378.4	472.5	554.8	584.2	665.6	685.2	701.6	719.2	732.1	723.7	688.1
Lithuania	-	1,709.8	1,436.7	1,248.7	1,249.2	1,162.1	1,176.5	1,237.5	1,342.5	1,372.4	1,393.5	1,347.1	1,324.2	1,339.0	1,387.5	1,376.8
Bulgaria	-	1,281.4	1,307.9	1,349.7	1,400.3	1,417.5	1,441.9	1,520.8	1,409.8	1,401.6	1,451.0	1,428.4	1,467.3	831.3	774.5	795.9
Romania	-	724.5	734.7	689.2	739.4	898.0	865.4	935.6	959.0	853.4	760.1	1,165.6	1,036.2	928.4	826.9	740.3
Albania	-	-	-	-	-	42.9	45.5	44.9	45.8	55.8	49.2	56.9	57.6	53.2	65.3	62.4
Bosnia-Herzegovina	-	225.8	-	-	-	-	-	212.0	226.8	224.9	235.7	-	-	-	-	-
Croatia	-	427.8	-	359.9	-	372.8	-	393.1	-	339.5	-	419.6	277.0	307.2	431.9	403.9
FYR Macedonia	221.8	252.4	213.9	235.9	201.0	212.9	209.3	204.8	205.9	170.7	170.6	176.3	167.1	164.4	167.9	175.5
Serbia and Montenegro	-	232.3	-	241.2	-	232.7	-	242.6	-	240.4	-	219.3	-	-	-	-
Belarus	789.3	788.6	685.2	676.9	636.5	641.5	665.8	675.5	699.3	757.4	779.7	796.3	855.4	846.0	798.3	814.3
Moldova	1,085.6	994.9	870.5	613.2	547.8	590.0	583.5	634.7	735.0	739.7	708.3	681.2	690.0	726.3	815.1	854.6
Russia	1,255.9	1,236.0	1,118.0	1,084.1	1,056.2	1,079.5	1,126.3	1,172.6	1,179.5	1,206.4	1,248.4	1,277.7	1,331.1	1,373.1	1,367.3	1,408.6
Ukraine	224.9	220.6	240.1	236.7	244.3	255.1	275.3	298.7	328.4	353.9	377.8	410.8	428.0	472.5	490.5	508.8
Armenia	24.4	31.1	34.4	34.6	37.0	44.0	60.8	71.6	85.7	93.0	136.5	130.0	158.9	161.3	213.1	229.0
Azerbaijan	170.5	160.7	141.3	123.3	119.2	112.6	102.5	116.2	124.5	132.2	140.5	151.3	157.9	166.5	172.2	190.6
Georgia	202.7	207.8	147.1	132.2	177.6	144.0	193.1	204.6	234.4	259.4	275.3	293.7	299.6	310.3	341.8	318.5
Kazakhstan <sup>b</sup>	31.1	29.7	29.2	26.3	30.0	82.8	86.9	97.2	101.2	105.6	107.0	104.7	109.1	110.3	185.8	578.7
Kyrgyzstan	-	437.3	399.4	319.6	288.0	243.0	252.4	257.4	253.0	240.5	264.2	262.5	232.6	246.3	238.5	232.1
Tajikistan	145.8	140.4	129.3	127.3	95.8	68.7	39.1	53.6	74.7	80.2	52.9	50.0	55.3	60.6	37.9	38.4
Turkmenistan	52.1	53.3	47.4	44.6	48.4	40.4	53.2	46.0	48.5	55.9	46.1	46.3	41.8	42.5	44.4	43.0
Uzbekistan	155.9	152.6	143.2	169.3	158.5	150.2	145.6	154.3	162.0	166.5	174.0	186.4	204.4	200.8	179.2	221.9

a. See notes to Table 6.1; for population sources, see notes to Tables 1.1 and 1.2.

b. Data for 2004 include all types of child care institutions (until 1994: infant homes; for 1994-2003: infant homes and disabled children in public institutional care).

### 6.3 Rate of children in infant homes (per 100,000 population aged 0-3)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic <sup>b</sup>	536.7	513.3	492.1	464.6	458.5	477.4	517.3	536.9	554.0	583.8	574.0	478.5	463.8	451.0	442.0	417.4
Hungary	484.1	437.7	410.3	386.7	398.7	396.5	390.4	395.6	391.1	388.5	373.2	317.3	306.2	295.4	281.9	266.1
Poland <sup>c</sup>	184.0	194.4	199.4	196.8	196.4	-	-	-	-	-	-	-	-	-	-	-
Slovakia	194.5	173.9	171.5	208.7	217.1	243.0	247.6	280.1	-	-	-	-	-	-	-	-
Slovenia	41.4	29.1	28.3	26.6	41.0	34.9	24.2	-	-	-	-	-	-	-	-	-
Estonia <sup>d</sup>	149.7	150.0	157.6	174.5	188.7	194.9	225.4	259.6	278.6	-	-	-	-	-	-	-
Latvia <sup>e</sup>	522.9	480.9	473.9	509.8	606.2	696.0	780.5	853.2	919.1	1,034.8	957.7	979.7	876.1	802.9	804.8	700.1
Lithuania	279.0	206.9	222.5	224.5	252.3	224.3	265.1	310.1	324.0	332.0	323.8	296.9	332.1	342.0	349.3	382.0
Bulgaria <sup>f</sup>	894.7	880.1	887.9	962.1	1,037.9	1,115.7	1,121.1	1,236.2	1,307.7	1,334.9	1,280.8	1,243.9	1,237.5	1,176.5	1,096.4	1,079.7
Romania <sup>g</sup>	-	610.9	639.6	682.2	790.6	1,093.1	900.9	952.9	950.7	-	-	-	-	-	-	-
Albania	-	-	-	-	-	62.4	80.2	79.9	87.7	69.7	58.8	79.6	80.0	74.3	78.3	60.2
Bosnia-Herzegovina <sup>h</sup>	-	-	-	-	-	-	-	-	-	60.9	54.7	-	-	-	-	-
Croatia	-	62.8	-	59.6	-	52.0	-	63.8	-	77.5	-	80.6	89.7	81.9	83.2	75.8
FYR Macedonia	49.1	47.3	50.0	59.7	66.2	81.1	88.0	65.5	80.4	73.1	76.9	68.0	50.8	65.9	95.7	128.2
Serbia and Montenegro <sup>i</sup>	-	48.5	-	44.5	-	53.4	-	72.9	-	59.2	-	66.8	-	-	-	-
Belarus	170.3	168.5	167.1	175.0	192.4	215.5	233.8	253.2	299.9	337.8	356.0	356.1	352.3	333.4	336.0	357.5
Moldova <sup>j</sup>	185.1	179.2	186.8	178.1	186.9	203.4	201.9	226.1	276.0	295.1	276.2	300.2	275.6	264.7	254.2	256.0
Russia	206.7	209.2	217.0	236.1	262.7	288.3	313.9	333.3	335.0	366.4	378.8	383.4	380.1	373.9	355.0	356.7
Ukraine <sup>k</sup>	155.6	154.6	153.4	155.0	165.5	183.4	207.2	230.4	244.1	281.6	301.7	308.5	309.7	343.8	337.1	340.0
Armenia <sup>l</sup>	13.2	11.6	10.8	13.2	12.5	13.9	15.3	17.9	19.0	21.7	23.8	31.4	34.0	29.7	31.7	31.4
Azerbaijan	35.9	34.6	33.3	27.1	28.3	29.2	26.0	26.6	30.7	33.5	36.9	42.2	42.4	38.5	34.1	31.2
Georgia	76.3	71.1	59.3	39.6	48.2	38.0	41.7	65.2	55.5	78.9	81.2	96.4	103.5	95.8	85.2	90.2
Kazakhstan	123.4	121.4	123.1	114.9	136.6	153.2	178.7	209.4	226.0	276.2	304.4	285.9	282.0	270.1	261.0	237.0
Kyrgyzstan	47.4	45.4	44.6	44.2	51.5	59.1	54.5	55.9	51.4	50.6	55.2	63.4	59.6	62.5	66.9	64.4
Tajikistan	61.4	57.6	57.2	57.2	39.0	32.3	27.4	23.0	20.4	22.1	23.7	27.8	25.7	28.1	23.6	22.8
Turkmenistan	61.4	59.4	51.3	45.1	44.3	40.2	45.4	31.6	35.8	41.5	50.0	48.8	43.2	46.7	47.9	49.2
Uzbekistan	34.8	35.3	32.8	33.3	31.8	31.8	29.5	30.2	30.5	30.8	33.4	35.2	34.8	38.3	36.5	34.2

a. For population sources, see notes to Tables 1.1 and 1.2.  
b. Institutions of the Ministry of Health.  
c. Since 1994 infant homes are included in child homes.  
d. Children aged 0-7. Since 1998 infant homes are joined with general type child homes.  
e. Data include children older than 3 years residing in social care centres for orphaned children.  
f. Data refer to children residing in homes for medico-social care for children.  
g. Since 1998 infant homes are included in child homes.  
h. Data refer to the Federation of B-H.  
i. Data for 1998 and 2000 exclude Kosovo.  
j. Data for 1992-2004 exclude Transdniestria.  
k. Data for 1989-1990 are taken from CIS Stat (1999).  
l. Children aged 0-5.

### 6.4 Children in care of foster parents or guardians (in 1,000s)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	7.5	7.7	7.7	7.5	7.6	7.6	7.7	8.0	7.9	7.9	8.1	8.0	8.5	8.4	8.7	8.6
Hungary <sup>b</sup>	9.0	8.9	8.6	8.5	8.4	8.3	8.0	7.9	8.0	7.9	7.6	7.8	8.2	8.4	8.6	8.8
Poland <sup>b</sup>	38.4	37.2	37.6	38.7	40.8	43.9	46.1	49.4	51.2	52.5	55.8	50.1	47.9	47.3	47.7	48.4
Slovakia <sup>b</sup>	2.3	2.3	2.4	2.4	2.4	2.4	2.3	2.3	2.2	2.4	2.6	2.7	2.8	2.8	2.5	2.7
Slovenia <sup>c</sup>	2.0	2.6	2.6	2.6	2.5	3.3	3.2	3.5	3.5	3.3	3.3	3.1	2.9	3.2	3.4	1.2
Estonia <sup>d</sup>	-	-	-	1.8	2.4	2.1	2.1	3.7	3.7	3.6	3.5	3.2	4.9	4.8	4.7	-
Latvia <sup>e</sup>	-	-	-	-	3.3	4.6	5.5	5.8	6.6	7.7	7.9	8.8	9.2	9.6	12.3	9.2
Lithuania <sup>f</sup>	4.6	4.6	4.9	5.2	5.4	5.3	5.9	6.2	6.6	7.0	7.7	7.6	7.7	7.6	7.8	8.0
Bulgaria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Romania <sup>g</sup>	-	-	-	7.5	8.3	8.3	10.5	11.0	-	17.0	22.7	29.3	36.3	41.8	45.4	48.9
Albania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-	-	-	4.2	4.0	4.0	4.0	3.7
FYR Macedonia	1.1	0.6	0.6	1.4	1.2	1.2	1.2	1.4	1.4	1.3	1.1	1.1	1.1	1.1	1.0	1.0
Serbia and Montenegro <sup>h</sup>	8.0	7.1	6.9	8.0	8.0	6.9	8.7	8.2	8.6	8.2	7.8	7.9	8.1	-	-	-
Belarus <sup>i</sup>	11.4	10.6	10.3	10.4	10.6	6.1	7.1	8.4	9.7	11.5	12.3	13.0	13.9	14.4	14.9	15.6
Moldova <sup>j</sup>	-	-	5.0	4.0	3.9	3.9	4.0	4.0	4.2	4.3	4.1	4.4	4.9	5.0	5.2	5.6
Russia <sup>i</sup>	174.0	170.5	180.3	190.5	201.4	225.5	252.5	278.1	293.5	303.9	312.3	329.0	347.5	359.7	371.0	374.9
Ukraine <sup>i</sup>	38.1	38.5	40.2	41.3	42.6	43.6	47.1	50.4	53.7	56.9	59.5	61.6	62.7	65.4	66.5	65.2
Armenia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Azerbaijan <sup>i</sup>	6.5	6.7	7.2	7.6	7.9	8.2	8.0	8.1	8.4	8.7	8.8	9.0	9.1	9.3	9.2	8.8
Georgia <sup>k</sup>	-	-	-	-	-	-	-	0.4	0.8	0.8	0.9	0.9	0.9	1.2	1.4	-
Kazakhstan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kyrgyzstan <sup>l</sup>	-	3.9	4.6	5.1	5.4	6.4	5.7	6.1	6.4	6.0	5.9	6.3	7.1	7.4	5.7	5.4
Tajikistan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Uzbekistan <sup>l</sup>	-	-	-	17.2	17.4	18.0	18.4	19.6	20.8	22.5	23.8	25.1	26.0	27.4	27.6	28.3

a. Children in foster or guardian care are in public care in the legal sense, but placed with families. Definitions of guardianship varies in different countries.  
b. Foster care only.  
c. Data for 2004 refer to foster care only.  
d. Data for 1992-1995 refer to guardian care only.  
e. Data for 1993-1997 refer to guardian care only.  
f. Foster parents can be grandparents or non-relatives who receive the right of guardianship within legal framework of Lithuania. Foster parents receive foster benefit for each child.  
g. Data for 1992-1998 refer to foster care only.  
h. Refers to new entrants to care during the year; data for 1998-2001 exclude Kosovo.  
i. Guardian care only.  
j. Data for 1992-2004 exclude Transdniestria.  
k. Data for 1996-1999 refer to guardian care only.

## 6.5 Rate of children in care of foster parents or guardians (per 100,000 population aged 0-17)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	270.4	282.0	288.6	289.0	297.1	307.3	323.7	347.3	355.4	366.4	385.2	387.2	420.1	423.4	445.2	449.0
Hungary	343.3	343.0	333.7	340.3	346.1	347.7	345.9	349.1	360.8	363.9	359.9	375.3	399.4	417.4	434.0	452.5
Poland	337.9	328.8	333.4	345.9	369.7	404.4	433.1	473.9	503.2	531.2	580.4	537.0	532.7	545.6	571.4	598.9
Slovakia	145.5	144.8	148.4	150.7	156.0	156.9	156.9	162.4	158.1	173.0	193.2	207.1	221.9	230.5	209.0	229.5
Slovenia	394.3	527.1	529.5	544.5	526.8	720.0	716.5	800.7	826.3	805.8	813.5	790.5	759.8	855.1	929.6	337.8
Estonia	-	-	-	469.5	643.3	591.3	605.8	1,084.4	1,124.8	1,126.0	1,121.6	1,060.7	1,632.5	1,663.5	1,467.0	-
Latvia	-	-	-	-	512.1	738.1	902.1	991.9	1,150.3	1,382.3	1,468.2	1,678.0	1,822.9	1,977.9	2,620.4	2,038.0
Lithuania	460.8	463.9	499.1	532.2	556.7	558.6	627.7	678.5	735.4	793.9	881.2	888.6	931.6	950.8	1,004.5	1,070.3
Bulgaria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Romania	-	-	-	121.1	136.7	141.4	183.8	198.1	-	325.2	444.7	585.6	738.0	879.3	981.0	1,092.9
Albania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-	-	-	448.4	429.1	445.6	445.1	428.0
FYR Macedonia	189.5	101.6	107.3	231.8	205.6	212.5	209.4	245.3	239.5	229.6	198.5	205.7	213.6	204.5	201.9	205.8
Serbia and Montenegro	273.5	243.8	243.3	284.1	287.6	250.1	316.2	303.2	321.2	310.8	298.4	305.4	317.5	-	-	-
Belarus	409.6	379.0	372.6	376.3	384.8	226.0	269.5	324.3	385.4	468.7	515.2	557.9	616.9	662.2	710.3	775.5
Moldova	-	-	348.3	285.0	278.9	280.4	289.5	302.1	370.6	388.4	383.7	424.3	480.9	519.1	561.1	624.0
Russia	433.0	424.7	450.8	480.5	515.7	584.3	664.3	746.1	804.6	853.9	903.1	982.4	1,075.8	1,153.7	1,230.4	1,290.3
Ukraine	285.8	290.1	305.1	314.1	328.5	342.9	378.4	414.9	453.7	495.5	534.2	572.1	608.7	664.6	699.7	714.7
Armenia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Azerbaijan	236.6	240.0	253.9	265.9	274.0	281.4	273.6	278.5	287.9	289.3	296.8	309.8	317.8	332.2	337.6	330.6
Georgia	-	-	-	-	-	-	-	35.2	70.0	67.8	81.0	74.6	75.5	109.5	135.6	-
Kazakhstan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kyrgyzstan	-	205.2	233.5	260.5	287.2	338.4	295.3	308.7	320.6	297.9	292.9	311.3	357.3	374.2	288.2	274.1
Tajikistan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Uzbekistan	-	-	-	168.4	167.0	170.7	171.6	180.0	189.6	204.2	216.2	228.4	238.4	253.0	257.5	267.5

a. See notes to Table 6.4; for population sources, see notes to Tables 1.1 and 1.2.

## 6.6. Adoptions (absolute number)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	546	499	530	475	463	543	628	575	634	499	566	512	545	464	588	552
Hungary	982	958	1,016	923	892	914	940	1,030	911	850	928	949	870	847	769	750
Poland	3,599	3,629	3,360	3,021	2,810	2,600	2,495	2,529	2,441	2,425	2,344	2,474	2,496	2,454	2,371	2,622
Slovakia	382	395	399	369	449	415	514	522	451	476	579	404	400	438	508	506
Slovenia	154	132	141	117	103	132	74	79	57	66	59	51	58	46	48	21
Estonia	-	-	-	262	318	284	270	269	227	193	168	164	200	131	130	-
Latvia <sup>a</sup>	589	584	641	615	469	422	387	384	404	373	378	228	288	292	326	297
Lithuania	-	-	-	332	115	308	220	229	254	191	135	77	99	147	165	196
Bulgaria	2,715	2,550	2,319	2,191	1,994	2,098	2,100	2,081	2,130	2,058	2,289	2,140	2,229	2,152	1,858	1,094
Romania	-	-	-	-	-	-	2,595	2,320	1,007	2,857	4,285	4,326	2,795	1,753	1,662	1,673
Albania	-	-	-	-	-	69	86	117	62	78	94	68	71	49	48	-
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croatia	282	232	107	118	220	309	175	180	157	164	161	171	148	135	154	143
FYR Macedonia	253	280	255	208	198	187	175	207	196	172	185	186	164	175	151	98
Serbia and Montenegro <sup>b</sup>	586	566	489	442	366	374	338	365	346	222	231	216	247	-	-	-
Belarus <sup>c</sup>	831	883	806	800	1,224	1,542	1,547	1,467	1,198	1,104	1,062	1,193	1,074	1,128	1,269	1,163
Moldova <sup>d</sup>	-	-	-	-	-	349	401	394	375	389	459	258	188	216	222	225
Russia	12,329	12,828	12,964	13,942	15,264	16,310	13,523	12,050	14,270	13,178	13,229	13,683	13,187	14,101	15,183	16,432
Ukraine	6,475	5,821	6,548	6,461	6,765	7,765	7,567	4,801	5,441	5,479	6,767	7,692	7,593	6,925	6,345	5,596
Armenia	538	312	216	184	168	447	521	207	388	318	272	135	148	178	215	150
Azerbaijan	697	608	526	462	375	521	396	455	411	458	368	257	245	293	312	258
Georgia <sup>e</sup>	-	-	-	-	-	-	-	106	435	166	133	109	124	150	150	65
Kazakhstan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kyrgyzstan	-	1,386	1,662	1,382	1,152	911	949	1,098	848	1,205	883	897	888	819	983	-
Tajikistan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Turkmenistan <sup>f</sup>	-	-	-	-	-	-	9	16	10	27	1	90	101	115	129	168
Uzbekistan	-	-	-	8,038	6,545	5,609	6,141	6,407	6,281	6,295	6,688	6,466	6,492	7,004	6,765	6,567

a. Data for 1989-1999 include step-adoptions and adoptions of persons 18 years and older.  
b. Data for 1998-2001 exclude Kosovo.  
c. Data include step-adoptions.  
d. Adoptions for 1994-2004 and population for 1997-2004 exclude Transnistria.  
e. Data exclude Abkhazia and Tskhinvali.  
f. 1995-1999: only adoptions of children from children's homes; 2000-2004: adoptions of children from infant homes and children's homes.

### 6.7 Gross adoption rate (per 100,000 population aged 0-3)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	104.2	96.7	103.6	93.7	92.7	111.8	137.1	134.8	160.0	133.6	156.1	142.3	152.0	129.2	161.4	148.5
Hungary	198.4	195.2	206.7	187.7	182.8	190.6	201.2	228.0	209.3	203.3	231.8	245.1	227.7	222.0	201.2	196.7
Poland	149.7	157.4	150.3	139.2	133.8	127.7	128.0	136.6	137.8	143.4	144.1	156.6	162.6	164.4	162.8	183.5
Slovakia	114.6	122.4	126.7	119.3	148.1	140.6	182.9	196.6	179.3	198.1	248.0	176.8	180.6	204.9	243.5	245.3
Slovenia	153.3	135.1	149.8	131.2	121.6	161.8	93.2	101.3	74.4	88.1	80.3	70.3	80.6	64.2	67.3	29.5
Estonia	-	-	-	310.6	420.5	422.1	443.8	479.7	430.7	381.3	341.8	336.5	407.6	262.8	228.5	-
Latvia	352.7	349.8	404.7	426.9	356.7	354.7	361.0	400.6	466.9	467.1	497.0	302.8	378.4	376.1	410.1	369.1
Lithuania	-	-	-	150.4	53.7	152.4	117.2	240.9	261.3	233.1	197.1	109.3	128.4	172.4	117.1	240.9
Bulgaria	588.7	577.9	551.3	557.0	542.5	603.2	639.1	668.1	725.0	744.4	850.3	791.8	850.9	814.0	698.6	410.8
Romania	-	-	-	-	-	-	264.3	243.4	107.9	309.9	467.4	471.3	306.3	198.0	193.7	197.9
Albania	-	-	-	-	-	24.5	30.7	41.3	22.1	28.7	35.4	28.7	33.7	23.5	23.4	-
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croatia	120.1	101.2	48.1	53.3	97.9	137.3	77.7	83.3	71.1	76.1	75.7	82.6	79.5	76.3	90.9	87.4
FYR Macedonia	190.3	212.7	196.8	165.1	161.9	154.0	143.7	169.9	162.3	146.8	166.1	176.4	161.4	177.3	156.3	103.3
Serbia and Montenegro	92.5	-	79.7	73.9	62.9	66.0	61.1	66.5	63.5	41.4	44.1	42.4	49.0	-	-	-
Belarus	127.9	139.2	132.8	139.3	228.0	308.8	332.9	339.5	297.9	291.1	288.8	326.6	293.2	308.6	351.1	325.8
Moldova	-	-	-	-	-	128.7	156.4	164.4	178.7	212.6	266.2	157.7	121.3	146.1	154.0	156.4
Russia	129.9	140.9	152.1	177.9	214.5	250.8	223.6	211.5	260.6	247.3	255.7	269.9	260.1	274.8	287.7	299.3
Ukraine	217.2	201.1	235.6	243.3	269.0	327.9	341.3	231.3	278.9	297.3	388.4	465.8	492.5	456.4	417.9	357.7
Armenia	178.2	102.5	71.2	61.1	57.8	166.5	217.2	96.5	197.8	173.8	159.0	85.3	101.6	116.0	147.0	104.7
Azerbaijan	100.7	87.6	74.9	65.4	54.0	78.0	61.3	73.6	69.3	81.1	70.8	53.3	53.5	65.1	69.7	56.9
Georgia	-	-	-	-	-	-	-	44.2	190.4	76.1	64.1	55.0	64.5	79.5	80.1	34.6
Kazakhstan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kyrgyzstan	-	269.0	317.2	260.1	246.8	227.1	233.8	266.3	202.5	283.2	209.3	220.0	223.9	209.7	252.4	-
Tajikistan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	1.7	3.1	2.0	5.5	0.2	18.9	21.4	24.9	28.4	37.4
Uzbekistan	-	-	-	301.8	243.4	209.0	232.0	246.7	247.9	256.6	285.4	290.1	304.5	336.9	329.4	321.3

a. See notes to table 6.6; for population sources, see notes to Tables 1.1 and 1.2.

### 6.8 Rate of children affected by parental divorce (per 1,000 population aged 0-17)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	12.4	12.8	11.8	11.7	12.6	13.2	13.5	14.8	14.7	14.7	9.8	13.5	14.9	15.1	15.7	16.0
Hungary	9.9	10.0	9.9	9.0	9.3	9.7	10.6	9.1	11.1	11.6	11.7	10.9	11.0	11.6	12.0	11.8
Poland	4.4	4.0	3.2	3.0	2.6	3.0	3.8	4.0	4.3	4.6	4.3	4.4	4.6	4.8	5.2	6.7
Slovakia	6.8	8.4	6.5	6.1	6.2	6.8	4.5	4.8	4.7	4.9	5.1	4.9	5.4	6.2	6.2	6.2
Slovenia	4.2	4.0	3.9	4.1	4.2	4.3	3.3	4.5	4.5	4.9	4.9	5.0	5.4	5.7	6.0	5.6
Estonia <sup>b</sup>	12.7	12.8	13.2	15.5	13.4	13.1	19.6	16.1	15.0	13.0	13.6	12.5	12.6	11.6	10.7	-
Latvia	14.3	14.0	14.7	20.6	14.3	12.9	12.5	9.4	10.0	9.9	10.1	10.7	10.1	10.6	8.8	9.7
Lithuania	11.6	12.1	15.4	14.0	13.6	12.0	11.7	13.1	13.4	13.9	13.2	12.9	12.9	12.8	12.8	13.1
Bulgaria	6.3	5.9	5.7	5.0	3.9	3.6	5.0	4.7	4.6	5.3	5.0	5.3	5.4	5.6	6.9	8.5
Romania	4.6	4.2	4.7	3.7	3.5	5.5	4.7	4.7	4.9	5.7	4.7	4.0	4.3	4.6	4.8	5.4
Albania	1.8	2.0	1.7	-	1.7	1.8	1.9	1.6	1.2	1.6	1.8	-	2.4	2.0	-	-
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	1.7	1.9	2.0	1.9	1.0	2.0	1.0	1.3
Croatia	5.7	5.9	5.7	4.2	5.3	5.2	5.0	4.3	4.6	4.5	3.6	4.3	4.9	4.5	5.1	5.2
FYR Macedonia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Serbia and Montenegro <sup>c</sup>	2.4	2.2	1.7	1.4	1.5	1.6	1.8	1.7	1.7	1.7	1.6	1.9	1.9	-	-	-
Belarus	11.3	11.3	12.9	14.0	16.4	15.8	15.2	16.1	17.8	17.9	17.0	16.0	14.9	13.8	11.9	10.6
Moldova <sup>d</sup>	7.4	8.1	9.0	10.0	9.6	8.7	9.4	-	-	8.4	7.6	7.8	8.3	7.6	8.2	7.2
Russia	11.9	11.6	13.0	14.3	15.1	15.8	15.4	12.3	12.3	10.8	-	-	-	-	-	-
Ukraine	11.7	11.9	12.9	14.2	14.1	-	-	-	-	-	-	13.3	10.8	11.7	11.5	11.7
Armenia	2.9	2.9	2.5	2.1	2.2	2.3	1.7	1.8	1.8	1.3	0.9	1.1	1.6	1.5	1.7	1.9
Azerbaijan	2.8	3.6	2.8	2.3	1.7	1.4	0.9	0.8	1.2	1.3	1.1	1.2	1.1	1.4	1.6	1.6
Georgia <sup>e</sup>	2.8	2.8	2.9	1.2	-	1.2	1.2	0.8	0.8	0.5	0.5	0.7	0.7	0.6	1.1	0.9
Kazakhstan	6.8	6.7	7.6	7.9	7.3	6.7	6.5	7.1	6.8	7.2	5.2	5.5	6.1	6.4	6.5	6.4
Kyrgyzstan	4.2	3.6	4.3	3.6	3.4	2.7	3.0	3.4	3.4	3.3	3.1	2.5	2.6	2.8	2.4	2.3
Tajikistan	2.7	2.7	2.9	2.2	1.8	1.4	1.4	1.6	1.2	1.0	0.9	0.8	0.8	0.8	0.9	-
Turkmenistan	2.8	2.7	3.4	3.1	3.0	3.0	3.1	3.4	2.9	2.6	2.8	2.9	2.9	2.7	3.1	2.7
Uzbekistan	2.7	2.7	2.9	2.7	2.1	1.8	1.6	1.7	1.8	0.9	0.4	1.2	1.2	1.6	1.5	1.5

a. For population sources, see notes to Tables 1.1 and 1.2.

b. Data for 2003 taken from website of Statistical Office of Estonia.

c. Data for Kosovo 1998-2001 are SMSO estimates.

d. Data for 1997-2004 exclude Transdniestria.

e. Data for 1992-2004 exclude Abkhazia and Tskhinvali.

## 7. Economic indicators

### 7.1 GDP per capita (in current PPP \$)<sup>a</sup>

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	-	-	10,120	10,340	10,810	11,720	12,610	12,810	12,900	13,230	14,000	15,020	15,780	15,600	19,408
Hungary	9,040	8,240	8,140	8,280	8,760	9,180	9,430	10,090	10,850	11,450	12,320	12,870	13,400	13,840	16,814
Poland	5,980	5,630	5,790	6,110	6,590	7,160	7,660	8,340	8,840	9,330	9,940	10,260	10,560	11,210	12,974
Slovakia	8,970	7,970	7,580	7,450	8,010	8,620	9,300	10,030	10,560	10,930	11,450	12,110	12,840	13,440	14,623
Slovenia	-	-	-	10,980	11,480	12,190	12,920	13,860	14,620	15,560	16,610	17,610	18,540	19,100	20,939
Estonia	8,050	7,720	6,420	6,170	6,330	6,780	7,290	8,520	8,970	9,150	10,280	11,370	12,260	12,680	14,555
Latvia	8,570	7,980	5,380	4,760	4,970	5,090	5,410	6,070	6,550	7,010	7,610	8,440	9,210	10,210	11,653
Lithuania	9,230	9,010	7,280	6,250	5,800	6,190	6,720	7,460	8,180	8,210	8,720	9,550	10,320	11,390	13,107
Bulgaria	5,950	5,840	5,120	5,220	5,460	5,840	5,460	5,250	5,500	5,690	6,230	6,740	7,130	7,540	8,078
Romania	5,320	4,830	4,600	4,800	5,100	5,610	5,970	5,740	5,550	5,580	5,720	6,160	6,560	7,140	8,480
Albania	2,550	1,940	1,890	2,060	2,300	2,550	2,880	2,710	3,130	3,450	4,060	4,550	4,830	4,710	4,978
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	-	-	-	-	-	6,250	7,032
Croatia	7,870	6,410	5,870	5,490	5,940	6,620	7,330	8,080	8,520	8,660	9,080	9,660	10,240	10,610	12,191
FYR Macedonia	5,730	5,950	5,820	5,440	5,370	5,350	5,480	5,650	5,870	6,170	6,570	6,390	6,470	6,750	6,610
Serbia and Montenegro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belarus	4,310	4,410	4,070	3,840	3,480	3,190	3,350	3,830	4,220	4,430	4,800	5,160	5,520	6,050	6,970
Moldova	3,040	2,650	1,930	1,950	1,390	1,410	1,290	1,360	1,290	1,270	1,290	1,380	1,470	1,760	1,729
Russia	8,340	8,200	7,500	6,870	6,020	5,930	5,860	6,130	6,030	6,500	7,240	7,720	8,230	8,950	9,902
Ukraine	6,930	6,580	6,200	5,570	4,330	3,950	3,640	3,630	3,660	3,760	4,110	4,570	4,870	5,430	6,394
Armenia	2,700	2,400	1,730	1,490	1,500	1,660	1,770	1,840	2,080	2,210	2,420	2,730	3,120	3,790	4,101
Azerbaijan	-	-	2,970	2,300	1,860	1,670	1,730	1,810	2,000	2,180	2,570	2,880	3,210	3,390	4,153
Georgia	4,060	3,320	1,890	1,390	1,280	1,390	1,540	1,650	1,690	1,780	1,880	2,090	2,260	2,610	2,844
Kazakhstan	4,620	4,240	4,190	3,830	3,460	3,310	3,420	3,600	3,630	3,910	4,590	5,330	5,870	6,280	7,440
Kyrgyzstan	1,980	1,860	1,620	1,410	1,170	1,120	1,200	1,350	1,390	1,460	1,560	1,640	1,620	1,690	1,935
Tajikistan	1,880	1,750	1,250	1,060	850	780	660	650	690	720	800	920	980	1,040	1,202
Turkmenistan	4,640	4,450	5,910	3,740	3,030	2,850	2,640	2,280	2,470	2,920	3,510	4,250	-	5,860	4,315
Uzbekistan	-	1,490	1,340	1,300	1,240	1,230	1,250	1,330	1,380	1,450	1,530	1,610	1,670	1,720	1,869

a. Taken from World Bank.

### 7.2 Employment ratio (number of employed as per cent of population aged 15-59)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic <sup>a</sup>	86.9	85.7	77.4	74.7	75.7	75.8	75.8	75.4	74.5	73.1	71.3	70.6	70.6	71.3	70.8	70.4
Hungary <sup>b</sup>	83.0	82.9	79.6	71.1	63.9	58.4	57.2	56.6	56.5	57.4	59.2	59.8	60.1	60.4	61.4	61.2
Poland <sup>b</sup>	74.7	70.6	67.1	64.8	63.3	62.3	62.4	62.6	63.0	63.1	60.0	59.0	57.7	55.5	54.4	54.8
Slovakia <sup>b</sup>	79.6	77.0	67.5	67.5	65.0	64.0	64.3	65.9	64.6	63.7	61.2	59.8	60.1	60.0	60.6	60.4
Slovenia <sup>c</sup>	74.5	71.7	66.1	62.6	66.6	67.0	69.2	68.8	70.2	70.9	69.5	69.3	70.7	71.2	69.1	72.9
Estonia <sup>d</sup>	87.9	86.9	85.5	82.4	77.8	76.7	73.2	72.6	73.1	72.4	69.4	68.7	69.3	70.2	70.8	70.5
Latvia <sup>c</sup>	-	-	-	-	-	-	-	64.1	67.4	67.5	66.5	64.9	66.6	68.5	69.6	70.1
Lithuania <sup>b</sup>	83.9	81.7	83.9	82.4	79.5	74.6	74.1	74.2	72.5	69.3	68.1	65.6	63.5	65.9	67.3	67.0
Bulgaria <sup>e</sup>	81.5	77.9	68.3	63.3	62.8	56.7	58.3	60.0	59.9	59.4	56.3	54.7	54.8	56.7	57.5	59.4
Romania <sup>b</sup>	77.4	76.8	77.0	75.2	72.1	77.8	79.3	77.6	78.4	77.0	76.5	76.2	75.4	65.7	66.2	65.4
Albania <sup>f</sup>	75.0	73.6	74.4	59.7	57.1	62.4	60.2	58.4	57.2	55.3	53.6	55.8	50.2	49.6	49.3	48.8
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croatia <sup>c</sup>	-	-	-	-	-	-	-	60.7	62.3	59.5	56.2	59.3	55.3	56.8	56.4	56.5
FYR Macedonia <sup>c</sup>	-	-	-	-	-	-	-	43.7	41.2	43.0	43.0	42.9	46.4	43.3	41.9	39.9
Serbia and Montenegro <sup>g</sup>	-	-	-	-	-	-	61.8	61.6	59.5	60.3	51.3	51.1	50.8	-	-	-
Belarus	84.2	83.7	81.9	79.8	78.6	76.3	71.5	70.8	70.9	71.5	71.6	71.2	70.4	69.3	68.0	67.0
Moldova <sup>h</sup>	81.0	80.1	80.0	79.3	65.2	64.5	63.9	63.2	67.8	64.8	65.9	65.9	64.5	64.0	57.0	54.5
Russia <sup>b</sup>	83.6	83.4	81.7	79.6	78.0	70.8	69.7	68.1	64.9	62.4	65.0	69.2	69.1	69.7	69.7	69.7
Ukraine <sup>i</sup>	83.2	81.9	80.5	78.5	76.2	73.1	76.8	77.2	76.7	74.9	65.3	66.3	66.2	67.0	66.9	67.0
Armenia	76.1	77.5	78.2	72.5	69.9	66.7	65.5	63.0	59.6	57.5	55.1	53.4	52.0	55.6	54.6	52.3
Azerbaijan	68.8	87.5	87.2	85.9	84.6	81.5	79.9	80.4	79.5	78.9	77.9	76.2	74.6	72.9	71.4	70.5
Georgia <sup>i</sup>	82.0	83.6	76.0	60.4	57.4	59.2	67.2	72.7	74.1	63.8	64.4	68.9	70.9	69.5	67.3	65.1
Kazakhstan <sup>k</sup>	82.6	81.4	79.9	78.0	71.2	68.2	69.1	69.5	69.8	67.1	67.2	67.9	72.8	71.9	73.5	74.0
Kyrgyzstan	74.3	73.2	72.3	74.8	67.3	64.8	64.1	63.5	64.0	63.6	64.6	63.3	62.6	61.8	61.2	60.9
Tajikistan	72.5	72.3	72.1	68.7	66.6	66.1	65.3	64.3	62.9	61.1	59.3	57.4	55.3	53.2	51.2	49.3
Turkmenistan <sup>l</sup>	77.9	74.1	73.7	73.2	72.6	72.4	72.5	72.0	72.6	73.1	78.7	-	82.0	-	-	-
Uzbekistan	72.0	73.9	75.3	73.7	71.9	71.3	70.3	69.4	68.6	67.7	66.5	65.3	64.4	63.9	63.7	63.9

a. Data since 1993 based on labour force survey.  
b. Data since 1994 based on labour force survey.  
c. Data based on labour force survey.  
d. Data for 2004 taken from ILO (2005).  
e. Data for 1989-1992 refer to state and cooperative sectors.  
f. Data since 2003 based on labour force survey; taken from ILO (2005).  
g. Data taken from ILO (2005).  
h. Data since 1998 based on labour force survey; data for 1992-2004 exclude Transdniestri.  
i. Data for 1989-1994 taken from CIS Stat (2001); data since 1995 based on labour force survey.  
j. Data since 1998 based on labour force survey.  
k. Data since 2001 based on labour force survey.  
l. Data for 1999 and 2001 based on surveys conducted in 2000 and 2001.

### 7.3 Real wages (index, base year = 100)<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic <sup>b</sup>	100	94.5	71.7	79.1	82.0	88.4	95.6	104.0	106.0	104.8	111.2	114.0	118.2	124.5	132.5	137.4
Hungary <sup>c</sup>	100	94.3	87.7	86.5	83.1	89.1	81.6	78.7	81.6	84.5	85.7	88.8	95.9	108.7	117.2	114.8
Poland <sup>d</sup>	100	75.6	75.4	73.3	71.2	71.6	73.7	77.8	82.6	85.4	109.6	111.0	113.7	114.7	118.6	120.0
Slovakia <sup>b</sup>	100	94.2	67.2	73.6	70.7	73.0	75.9	81.3	86.7	88.1	85.4	81.3	82.0	87.0	85.2	87.3
Slovenia <sup>e,f</sup>	100	73.8	61.8	60.1	68.7	72.9	76.8	80.3	82.1	83.3	85.9	87.1	89.8	91.6	93.3	95.4
Estonia <sup>b,f</sup>	100	102.5	56.8	45.2	46.3	51.0	54.1	55.2	59.5	63.5	66.2	70.3	74.6	80.3	86.8	91.9
Latvia <sup>b</sup>	100	105.0	71.9	49.0	51.5	57.6	57.4	53.9	60.4	64.1	66.2	68.4	71.1	75.7	81.9	84.4
Lithuania <sup>g</sup>	100	108.8	76.8	51.5	32.7	37.2	39.2	40.8	47.4	53.9	56.7	55.2	55.2	57.3	61.8	66.2
Bulgaria <sup>b,h</sup>	100	109.2	67.5	75.0	68.4	53.5	50.6	41.7	44.9	43.0	47.0	49.1	50.6	53.1	55.1	55.4
Romania <sup>e</sup>	100	107.8	91.6	81.2	68.8	70.3	79.3	88.3	68.6	67.4	68.6	72.1	77.1	77.9	86.0	90.7
Albania <sup>b</sup>	-	-	-	-	-	-	-	100	83.1	82.9	91.2	107.3	119.8	130.0	137.7	153.2
Bosnia-Herzegovina <sup>i</sup>	-	-	-	-	-	-	-	-	100	117.6	135.0	143.4	151.2	165.0	178.8	182.5
Croatia	-	-	-	-	-	-	100	108.5	118.5	126.3	133.5	134.5	133.2	138.2	141.7	143.0
FYR Macedonia	100	79.2	67.9	41.6	56.5	51.2	48.6	48.8	49.5	51.0	52.9	52.7	51.8	54.1	56.1	58.4
Serbia and Montenegro	-	-	-	-	-	100	116.1	115.6	116.4	118.9	106.8	131.7	147.6	-	-	-
Belarus <sup>b</sup>	-	-	-	-	100	60.6	57.6	60.5	69.1	81.5	87.4	97.8	126.8	136.7	141.1	165.6
Moldova <sup>b</sup>	100	113.7	105.2	61.6	61.8	50.0	50.7	53.7	56.4	59.6	52.1	53.2	64.7	78.2	90.3	99.5
Russia <sup>b</sup>	100	109.1	102.4	68.9	69.1	63.1	45.5	51.5	53.9	46.8	36.4	44.0	52.8	61.4	68.1	75.2
Ukraine	100	109.3	114.2	123.7	63.2	56.5	62.3	59.3	57.7	55.7	48.4	48.9	59.0	70.8	82.7	96.7
Armenia	100	104.4	37.5	20.5	6.5	18.4	22.0	32.0	28.8	35.1	39.0	44.3	46.2	51.0	48.7	45.6
Azerbaijan <sup>b,h</sup>	100	101.1	80.0	95.0	62.4	24.8	19.8	23.6	36.2	43.3	51.9	61.2	70.8	83.5	100.3	120.6
Georgia <sup>b</sup>	100	111.2	76.5	50.5	24.1	33.5	28.2	44.0	59.6	74.9	76.6	78.8	98.9	111.8	118.3	139.3
Kazakhstan <sup>b</sup>	-	-	100	64.8	49.1	32.9	33.4	34.3	36.5	38.6	43.7	46.8	52.0	57.6	61.6	70.6
Kyrgyzstan <sup>b</sup>	-	100	70.7	59.4	49.6	42.0	43.5	43.9	49.3	55.2	50.7	49.9	55.4	62.8	69.3	77.9
Tajikistan	100	106.4	89.9	39.3	13.6	6.5	24.3	15.0	13.4	17.4	17.2	17.4	18.9	23.4	27.5	35.6
Turkmenistan <sup>i</sup>	-	-	-	-	100	52.9	24.7	20.2	24.2	30.3	29.8	49.6	65.4	65.1	105.4	108.2
Uzbekistan	100	108.7	95.9	94.7	17.8	9.9	9.2	13.0	12.8	14.8	18.9	22.5	25.8	25.5	28.7	32.8

a. Based on IRC estimate; consumer price index taken from EBRD (2005).  
b. Based on gross wages.  
c. For 1989-1994 real net index calculated by central statistical office.  
d. Break in time-series in 1999 because since 1999 social security contributions paid by the insured employee are included.  
e. Based on net wages.  
f. Data on wages for 2004 based on EBRD (2005).  
g. Data on wages for 1991-2001 are taken from EBRD; for 2002-2004 based on net wages.  
h. Public sector only.  
i. Data refer to Federation of B-H.  
j. Data on wages for 1997-2004 based on EBRD (2003, 2005).

### 7.4 Distribution of earnings: Gini coefficient<sup>a</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	0.204	-	0.212	0.214	0.258	0.260	0.282	0.254	0.259	0.258	0.257	0.270	0.273	0.273	-	-
Hungary <sup>b,c</sup>	0.268	0.293	-	0.305	0.320	0.324	-	-	0.350	-	-	-	0.386	-	-	-
Poland <sup>d</sup>	0.207	-	0.239	0.247	0.256	0.281	0.290	0.302	0.300	0.294	0.305	-	-	-	-	0.351
Slovakia	0.200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Slovenia	0.219	0.232	0.273	0.260	0.276	0.275	0.358	0.298	0.307	0.306	0.305	0.306	0.310	0.307	0.305	0.303
Estonia <sup>b,e</sup>	0.253	-	-	-	-	-	-	-	0.336	0.384	0.401	0.376	0.388	-	-	-
Latvia <sup>b,f</sup>	0.244	-	0.247	0.333	0.283	0.325	0.346	0.349	0.336	0.332	0.333	0.337	0.322	0.328	0.332	0.321
Lithuania <sup>b,e</sup>	0.260	-	-	0.372	-	0.390	0.374	0.350	0.345	0.357	0.368	-	0.382	0.390	0.393	0.394
Bulgaria <sup>e,f</sup>	-	0.212	0.262	-	0.251	-	-	0.291	-	-	-	-	-	-	-	-
Romania	0.155	-	0.204	-	0.226	0.277	0.287	0.305	0.352	0.358	0.372	0.406	0.388	0.391	0.358	-
Albania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FYR Macedonia <sup>g</sup>	-	0.223	0.267	0.235	0.272	0.253	0.270	0.250	0.259	0.271	0.277	0.277	0.286	0.282	0.262	0.243
Serbia and Montenegro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belarus <sup>b,h</sup>	0.234	-	-	0.341	0.399	-	0.373	0.356	0.354	0.351	0.337	0.337	0.343	0.342	0.340	0.338
Moldova <sup>b,i</sup>	0.250	-	-	0.411	0.437	0.379	0.390	0.414	-	0.426	0.441	0.392	0.391	0.426	0.372	0.342
Russia <sup>a</sup>	0.271	0.269	0.325	0.371	0.461	0.446	0.471	0.483	-	-	-	-	0.521	0.491	-	0.469
Ukraine	0.244	-	-	0.251	0.364	-	-	0.413	0.406	0.391	0.427	0.462	0.452	0.418	0.408	0.410
Armenia <sup>b</sup>	0.258	-	0.296	0.355	0.366	0.321	0.381	-	-	-	-	0.486	-	-	0.543	-
Azerbaijan <sup>b</sup>	0.275	-	-	0.361	-	0.428	0.459	0.458	0.462	0.462	-	0.506	0.501	0.508	-	-
Georgia	0.301	-	-	0.369	0.400	-	-	-	0.498	-	-	-	-	-	-	-
Kazakhstan <sup>b</sup>	0.276	-	-	-	-	-	-	-	-	-	-	-	-	-	0.359	0.370
Kyrgyzstan <sup>b,e</sup>	0.260	-	-	0.300	0.445	0.443	0.395	0.428	0.431	0.429	0.466	0.470	0.512	0.490	0.478	0.473
Tajikistan <sup>b</sup>	0.276	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Turkmenistan <sup>b,f</sup>	0.255	-	-	-	-	-	-	-	0.249	0.209	0.265	-	-	-	-	-
Uzbekistan <sup>b</sup>	0.257	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

a. Excludes small-scale employers.  
b. 1989: Atkinson and Micklewright (1992).  
c. 1989: refers to 1988.  
d. 1989-91: net earnings. 1992-99: gross earnings.  
e. Excludes self-employed and farmers.  
f. Public sector.  
g. Net earnings.  
h. Excludes small private enterprises.  
i. 1992-2001: excludes private enterprises. 2001: Gini for private enterprises is 0.44. 1993-2004: excludes Transdniestri.

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## TECHNICAL NOTES AND GLOSSARY

Since 1992, the UNICEF Innocenti Research Centre has been gathering and sharing data on the situation of children and women in countries of Central and Eastern Europe, the Commonwealth of Independent States and the Baltic States. The TransMONEE Database, which contains a wealth of statistical information covering the period 1989 to the present on social and economic issues relevant to the welfare of children, young people and women, is published annually and is available electronically at <http://www.unicef-icdc.org/resources/transmonee.html>

### Main data sources

**TransMONEE Database** The data reported in the Statistical Annex and part of the data used in the report are from the TransMONEE Database. The main sources of the data in the TransMONEE Database are the National Statistical Offices (NSO) in the CEE/CIS countries and Baltic States. The NSOs annually complete a standardized template covering several aspects of the situation of children. Complementary data are obtained from other international organizations and indicators are calculated by UNICEF IRC. Data may therefore not fully correspond to those in other UNICEF or United Nations publications. As with any cross-national statistical database, concepts and measures may differ widely across the region: notes on the specific definitions of the statistics are reported at the end of the tables.

**Household survey data** For the analysis of child poverty in the countries of SEE/CIS, this report made direct use of survey microdata for five countries of the region. All the surveys are representative at the national level and at some subnational levels. A description of the main assumptions in the use of survey data made for the analysis of child poverty is given in chapter 2.

The household surveys directly analysed for this report are the following:

- Albanian Living Standards Measurement Survey, year 2002. Sample size: 3,599 households. The description of the survey and the full dataset can be obtained at <http://www.worldbank.org/lsm/guide/select.html>
- Bulgarian Integrated Household Survey, year 2001. Sample size: 2,500 households. The description of the survey and the full dataset can be obtained at <http://www.worldbank.org/lsm/guide/select.html>
- Moldova Household Budget Survey, year 2003. Sample size: 6,125 households. Coverage of this survey does not include Transdniestr. Data can be obtained at [http://www.statistica.md/statistics/dat/332/en/bug\\_eng.htm](http://www.statistica.md/statistics/dat/332/en/bug_eng.htm)
- Russia NOBUS Survey (National Survey on Household Welfare and Social Program Participation), year 2003. Sample size: 44,524 households. The description of the survey and the full dataset can be obtained at <http://nobus.worldbank.org.ru>
- Tajikistan Living Standards Survey, year 2003. Sample size: 4,156 households. The description of the survey and the full dataset can be obtained at <http://www.worldbank.org/lsm/guide/select.html>

Detailed information on these surveys can be found at <http://www.internationalsurveynetwork.org>

### Glossary

**abortion** Termination of pregnancy. In the data reported in the Statistical Annex, the term includes induced early foetal deaths and excludes spontaneous abortions (miscarriages).

**adolescents** According to the UN definition, the population aged 10–19. The term includes early, middle and late adolescence.

**adolescent birth rate** The frequency of childbirth among very young women calculated as the number of live births among women aged 15–19 per 1,000 mid-year female population in the same age group.

**adoption** Domestic adoption involves adoptive parents of the same nationality and the same country of residence as the child and may include ‘step-adoption’ or adoption by a parent’s new spouse. Intercountry adoption involves a change in the child’s habitual country of residence, irrespective of the nationality of the adoptive parents. International adoption involves adoptive parents of a nationality other than that of the child irrespective of where they reside.

**Bosnia and Herzegovina** Consists of Republika Sprska and the Federation of Bosnia Herzegovina. The statistical offices are, respectively, Bosnia Herzegovina Agency for Statistics (BHAS), and the two offices, the Statistical Office of Republika Sprska (SIRS) and the Statistical Office of the Federation of Bosnia-Herzegovina (SOFBH).

**child dependency ratio** The ratio of the population aged 0–14 to the population aged 15–59.

**children in infant homes** The number of children in infant homes is a useful proxy for indicators of child abandonment and institutional care. Infant homes normally care for very young children (0–3 years) who are without parental care. Infants may enter homes on temporary placement; in some countries children may be over the age of three.

**children in residential care** The estimates of children in residential care include children in infant homes, orphanages and boarding homes and schools, including homes for disabled children, family-type homes, SOS villages, etc. Children in punitive institutions are normally excluded; definitions differ between countries.

**education level** Data on education levels are based on the International Standard Classification System of Education Levels (ISCED97, see below), although the situation may differ between countries.

- Pre-primary education (ISCED 0): children aged 3–5 or 3–6; excludes nursery provision for children aged 0–2.
- Basic education (ISCED 1/2): ‘compulsory schooling’ or ‘elementary schooling’, normally lasts from age 6/7 to age 14/15; often divided into primary (to age 10), and lower secondary levels.
- General secondary (ISCED 3A): general secondary schools (gymnasia/lycees) with 2–4 year programmes of academic study, often leading to higher education, with entry on a selective basis; in CIS countries, this level normally comprises the two or three upper classes of the comprehensive school, while in CEE countries it involves longer programmes at separate institutions; in a number of countries, the gymnasium streams begin in lower secondary grades.

- **Vocational/technical education (ISCED 3B/3C):** programmes preparing for entry into specific occupations or trades; they may or may not allow entry to higher education.

**education/school enrolment ratio** Net enrolment ratio is the ratio of the number of children of official school age (as defined by the national education system) who are enrolled in school to the population of the corresponding official school age. Gross enrolment rate is the ratio of total enrolment, regardless of age, to the population of the age group that officially corresponds to the level of education shown.

**foster/guardian care** Children in foster and guardian care are in public care in the legal sense, but placed with families rather than in institutions. Foster parents normally receive a special fee or allowance. In many countries, this is not available for guardians who are relatives (e.g. grandparents).

**Gini coefficient** Measures the extent to which a distribution (for example of income) among individuals or households deviates from a perfectly equal distribution. The Gini index ranges between 0 (in the case of perfect equality) and 1 (perfect inequality).

**gross adoption rate** The total number of adoptions per 100,000 children aged 0–3, although there may also be adoptions of older children.

**gross domestic product (GDP)** A measure of the income generated in a country. It corresponds to the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

**immunization** DTP refers to diphtheria, tetanus and pertussis vaccine. OPV refers to oral polio vaccine. BCG refers to tuberculosis vaccine.

**incomplete family** A family in which children under 18 years of age live with one or both parents absent.

**infant mortality rate (IMR)** The number of infants dying before reaching one year of age, per 1,000 live births in a given year. See also live births.

**life expectancy at birth** The number of years a newborn infant would live if prevailing patterns of mortality at the time of the child's birth were to stay the same throughout his or her life.

**live births** According to the standard definition used by the World Health Organization, this includes all births, with the exception of stillbirths, regardless of the size, gestation age, or 'viability' of the newborn infant, and regardless of whether the infant dies soon after birth or before the required birth registration date. A few countries covered in the TransMONEE Database used the WHO concept before transition. Many used the 'Soviet concept' according to which infants who were not breathing when born were classified as 'stillbirths', and infants born before the end of the 28th week of pregnancy and weighing under 1,000 grams or measuring less than 35 cm and who died during the first seven days of life were classified as 'miscarriages'. Most countries examined have moved towards the WHO definition, and only a few still use the Soviet concept.

**maternal mortality rate** The number of deaths of women due to pregnancy or childbirth-related causes per 100,000 live births.

**nuclear household** For the purposes of this study, following standard usage, a 'nuclear household' consists of parent(s) (including step-parents) and their children, without anyone else. A 'non nuclear household' can include, aside from parents and their children, cousins, aunts, uncles, grandparents, grandchildren, foster children and non-related members.

**oblast** The first level subnational administrative unit in Russia and some of the other CIS countries. Some oblasts in the Russian Federation are autonomous republic; large cities such as Moscow and St. Petersburg also have the same status as oblast. With the 2000 federal reform in Russia, the oblasts have *de facto* become the second level subnational administrative units and are grouped under seven large federal districts.

**overweight** A measure of malnutrition indicating excessive weight per height. Overweight prevalence is the percentage of children under five whose weight for height is more than two standard deviations above the median for the international reference population adopted by WHO.

**population data** These refer to the *de jure* population (all people resident in an area, including those who may be temporarily absent) as opposed to the *de facto* population (all people physically present in an area at the time of a population census or population estimate). Refugees not permanently settled in the country of asylum are normally excluded.

**PPP** PPP, or purchasing power parity rates allow a standard comparison of real price levels between countries, just as conventional price indexes allow comparison of real values over time. The PPP is a rate such that a representative basket of goods in country A costs the same as in country B if the currencies are exchanged at that rate.

**public expenditure on health** Consists of recurrent and capital spending from government (central and local) budgets, external borrowings and grants (including donations from international agencies and non-governmental organizations), and social (or compulsory) health insurance funds. For most countries, the data on public expenditure on health used in the report are those reported directly to UNICEF IRC by the NSOs. Data for some countries are from the World Health Organization 'Health for All Database' (<http://www.euro.who.int>).

**Serbia and Montenegro** In 2003, the Federal Republic of Yugoslavia became officially known as 'The State Union of Serbia and Montenegro', consisting of the Republic of Serbia and the Republic of Montenegro, referred to here as 'Serbia and Montenegro'. In the Statistical Annex, where relevant, the exclusion of the UN-administered province of Kosovo in data for Serbia and Montenegro is noted. In the Statistical Annex, the acronym SMSO indicates the Serbia and Montenegro Statistical Office, formerly Federal Statistical Office of Serbia and Montenegro. In Spring 2006, Montenegro became an independent state.

**stunting** A measure of malnutrition which indicates a chronic state. Prevalence of stunting is the percentage of children under five years of age whose height for age is less than minus two standard deviations from the median for the international reference population adopted by the WHO.

**total fertility rate (TFR)** Represents the number of children a woman would bear if she were to live to the end

of her childbearing years and bear children in accordance with prevailing age-specific fertility rates.

**under-five mortality rate (U5MR)** The probability that a newborn child will die before the age of five if subject to the current age-specific mortality rates. The probability is expressed as a rate per 1,000. In the Statistical Annex, the U5MR has been calculated by comparing the number of under-five deaths to the number of live births in the current year.

**underweight** A measure of malnutrition indicating low

weight for height. Prevalence of underweight is the percentage of children under five whose weight for height is less than minus two standard deviations from the median for the international reference population adopted by the WHO.

**wasting** A measure of malnutrition, considered to reflect current malnutrition. Prevalence of wasting is the percentage of children under five whose weight for age is less than minus two standard deviations from the median for the international reference population adopted by the WHO.

## Innocenti Social Monitor 2006

### Understanding Child Poverty in South-Eastern Europe and the Commonwealth of Independent States

This is a study of child poverty in a fast-changing region. Since 1998 almost all countries of the South-Eastern Europe and Commonwealth of Independent States region have shown signs of economic recovery. The numbers of people living in income poverty has fallen, living standards have generally improved and opportunities for many children in the region have expanded. This signals a turning point in the dramatic decline in social and economic conditions experienced by most children in the region in the early 1990s.

Yet there is a serious risk that a part of the new generations of children born since the start of the transition is being left behind. The study shows that not all children are benefiting from the economic growth and that Governments in the region need to give higher policy priority to tackling disadvantage and deprivation endured by children.

Pursuing a child rights perspective, the study set out to measure and understand better the nature and scale of child poverty, as distinct from adult poverty; it highlights the large disparities in child well-being which have emerged in this period of economic expansion, between countries, between regions within countries, and between families; it points to ways in which governments in the region could more effectively address marginalisation and disparities among children.

The Innocenti Social Monitor 2006 provides practical examples of ways in which children can be given distinct attention and visibility in the analysis of poverty and in policy priorities, while also stressing that data collection has to be improved and made more accessible in order to allow the impact of policies on children to be effectively assessed and addressed.

UNICEF Innocenti Research Centre  
Piazza SS. Annunziata, 12  
50122 Florence, Italy

Tel.: (+39) 055 203 30  
Fax: (+39) 055 203 32 20  
E-mail (general information): [florence@unicef.org](mailto:florence@unicef.org)  
E-mail (publication orders): [florenceorders@unicef.org](mailto:florenceorders@unicef.org)  
Website: [www.unicef.org/irc](http://www.unicef.org/irc)